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THE IMPROVEMENT OF LISTENING COMPREHENSION  
IN PARTIALLY SIGHTED STUDENTS

by

ROBERT WILLIAM BISCHOFF

A DISSERTATION

Presented to the School of Education  
and the Graduate School of the University of Oregon  
in partial fulfillment  
of the requirements for the degree of  
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(Dr. Harold Abel, Dissertation Advisor)



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R. W. B.



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## CHAPTER I

### INTRODUCTION TO THE PROBLEM

Present educational programs for partially-sighted students have been based largely on experience and observation. Few programs, methods and procedures have been validated through research (Karnes and Wollersheim, 1963).

Mrs. Winifred Hathaway was responsible, to a large extent, for the philosophy and program for educating partially-sighted children. As Associate Director of the National Society for the Prevention of Blindness, she alerted public school leaders to the need for special education for the partially sighted. She aided in training teachers and traveled widely awakening people to the needs of the partially sighted (Kirk, 1962).

One type of educational placement for the partially-sighted student is the regular classroom, including service by itinerant teachers who provide special help two or three times a week. Mrs. F. Bertram, at Oakland, California, in 1938, developed the Itinerant Teacher Program for the partially sighted. These specially-trained teachers bring materials to partially-sighted students. In addition, they act as consultants to the regular classroom teacher as to methods,



approaches and guidance procedures that should be used with partially-sighted students (Tudyman and Bertram, 1952).

Itinerant teachers and the regular classroom teachers have been aware of the need to emphasize listening to make up for the visual loss (Pelone, 1957). This important learning area has been discussed, but little has been done systematically by the teachers involved to improve partially-sighted students' ability to learn by listening.

The expectation of this study was that a sequential program of listening comprehension instruction could effect results that would carry over into regular school activities.

#### Statement of the Problem

The purpose of the study was to compare the listening comprehension of partially-sighted students. Two groups received special instruction in listening comprehension, a third group (control) did not.

Objectives to be pursued, utilizing two types of sequences for teaching listening comprehension to partially-sighted students, were:

1. To compare for significant differences pre-test and post test scores of partially-sighted students who received special instruction in listening comprehension and partially-sighted students who did not receive special instruction in listening comprehension.
- 2a. To compare for significant differences the listening comprehension of partially-sighted students who had received special instruction in listening comprehension, with that of partially-sighted students who had not received special instruction in listening comprehension.



2b. To compare the differential effect of two types of listening comprehension instruction.

### Significance of the Study

Research on partially-sighted children has been concentrated almost exclusively on the medical, physiological and optical aspects of their handicap. The literature reveals little research on educational programs for partially-sighted students (Karnes and Wollersheim, 1963).

Bateman (1963) found that as a group partially-sighted students are of average intellectual ability. Subjectively, she noted that many of the children appear to fall into one of two large groups which might be described as follows: (a) children with very severe visual handicaps, above average intelligence, and eye conditions other than and more complex than simple refractive errors who were achieving well in school in spite of their severe visual limitations, and (b) children with relatively minor visual problems (predominantly refractive), who were either low achievers or below average in intelligence, or both.

It is interesting to note that of the 192 pages in the most recent edition of Hathaway's book (1959), only four and one-eighth pages are devoted to a discussion of methods and techniques of teaching the partially-sighted child. The logical explanation for so little attention is that there has been little or no research to indicate that



partially-sighted children need special methods and techniques of instruction (Karnes and Wollersheim, 1963). Existing research indicates that these children have specific weaknesses that interfere with their total adjustment. This results in their instructional program requiring not only more time and special materials, but also the use of special methods and techniques (Morris, 1966).

The extent to which a partially-sighted child can adjust and achieve satisfactorily in a regular class is dependent upon several factors. Pelone (1957) suggested that some of the factors in teaching partially-sighted are:

1. Eye-rest periods, such as use of the oral approach whenever possible; alternation of board and seat work; and avoidance of excessive and unnecessary reading.
2. Training for "ear-mindedness" rather than "eye-mindedness"; and a substitution of manual and auditory experiences for visual tasks whenever possible (p. 35).

Partially-sighted students have a marked disadvantage in reading. The median silent reading rate for sighted high school seniors is reported by Harris (1956) to be 251 words per minute. Although there is little information available on reading rates for partially sighted using large type, evidence accrued at the American Printing House for the Blind indicates that students using large type read little faster than do students employing braille (Morris, 1966). Meyers and Ethington (1956) reported standard braille reading rates which range



from 90 words per minute for high school students down to 50 words per minute for fifth and sixth grade braille students. Nolan (1959) found the median reading rate for partially-sighted students to be about 100 words per minute, which is less than half the median speed of seeing children. Thus, to cover the same amount of reading material in any given selection, the partially-sighted student must read from two to three times as long as his sighted peer. In terms of educational handicap, the reading-rate discrepancy is one that grows in significance as a partially-sighted student advances through the grades and progressively encounters greater reading requirements (Morris, 1966).

Oral presentation of material to partially-sighted students is frequently appropriate; and its use is increasing. A typical speaking rate for a trained professional reader, such as those who read "Talking Books," is 175 words per minute (Foulke, Amster, Nolan and Bixler, 1962). Use of recorded material could provide a partial solution to the time discrepancy problem, since the recorded rate is almost twice the high school partially-sighted reading rate and about three and a half times the elementary school partially-sighted student reading rate (Morris, 1966). Thus, it could be expected that the partially-sighted listener has an advantage over the partially-sighted reader; but he still lags behind the sighted reader (Foulke, Amster, Nolan and Bixler, 1962).



Nolan (1963) found that, other things being equal, the relative rates of comprehension by reading and listening may be related to whichever proves superior. When reading rates are slower than listening rates, listening comprehension may be superior. When reading rates are faster than listening rates, reading comprehension may be superior. For the partially-sighted, reading rates rarely exceed listening rates.

The slow rate of reading comprehension of the partially-sighted student handicaps him on two counts. First, he cannot be exposed to as much information per unit of time as his sighted peer. Thus, he has reduced opportunities for the elaboration of the network of associations that facilitate transfer of training and thinking. Second, it may be that because of the slow rate, the conditions that lead to efficient learning are minimized. The slow rate at which he receives information decreases the temporal contiguity of the elements of information to be learned. Temporal contiguity is an important condition for facilitating learning (Foulke, Amster, Nolan, and Bixler, 1962).

#### Definition of Terms

##### Partially-Sighted Students

The partially-sighted students included in this study conform to the interpretation of a partially-sighted student as defined by the



National Society for the Prevention of Blindness. Partially-sighted students are defined as those who:

- a. Have a visual acuity between 20/70 and 20/200 in the better eye after the best possible correction, and who can still use sight as their chief channel of learning.
- b. Can benefit from either temporary or permanent use of appropriate special facilities (Tudyman, 1954, p. 226).

#### Itinerant Teacher

The itinerant teacher is defined as one who has had specialized training in the teaching of partially-sighted students. Thus, his professional competence is equivalent to that of other certified teachers of exceptional children. His "itinerant" assignment, however, requires travel from school to school, rather than assignment to a single class of partially-sighted students. His "students" are enrolled in regular classes. His duties include furnishing to the regular teachers special materials with instruction on their use as well as direct instruction and guidance to some partially-sighted students (Tudyman, 1952).

#### Listening Comprehension

Listening comprehension is defined as the ability to understand and remember the meanings back of word signals, especially the comprehension of ideas represented by different combinations of these word symbols. It implies also the ability to use the ideas



presented to build understanding by adding to, modifying, or rejecting previous learning (Pratt and Greene, 1964).

### Procedural Overview

Two groups received special instruction in listening comprehension; a third group (control) did not. The students were in grades four through nine. Standardized measuring devices and a ten-week instructional period including pre- and post test were utilized to provide an accurate measure of the effect of instruction in listening comprehension.

### Summary

This chapter contained an introduction to the problem, citing the lack of research based educational programs for partially-sighted students. It presented also, a statement of the problem: (1) to compare the pre- and post test performance in listening comprehension of two experimental groups and a control group; (2a) to compare each experimental group with the control group; and (2b) to compare the two experimental groups. The section on significance of the study discussed the need for listening comprehension instruction for partially-sighted students. Terms used in the study were defined. A procedural overview was presented.



## CHAPTER II

### A SURVEY OF RELATED LITERATURE

This chapter contains a review of representative literature directly related to the topic of this study. Such literature falls into five categories: (1) education of the partially-sighted student, (2) listening in education, (3) the need for instruction in listening, (4) interrelationship of reading and listening, (5) research related to listening.

#### Education of the Partially-Sighted Student

As mentioned previously, current programs for partially-sighted students have been developed primarily by experience and observation. New knowledge, obtained through research, should enable educators to improve educational offerings to this segment of handicapped pupils. It is apparent that partially-sighted students need special education. A few studies have attempted to pin-point specific needs of partially-sighted students, but there has been no attempt to formulate, on a research basis, specific educational programs designed to help these students overcome and/or compensate for specific weaknesses and to evaluate the effectiveness of treatment programs upon these delineated



needs. Special programs can more adequately meet the specific needs of partially-sighted students when such needs are more precisely determined (Karnes and Wollersheim, 1963).

Scholl (1966) states that by its very nature, a visual impairment restricts the life activities of the individual. Since the partially sighted cannot work as rapidly as their fully-sighted counterparts, Morris (1966) suggests that "educators have a problem of even greater magnitude than when working with the nonhandicapped" (p. 1). Olsen (1963), writing about curriculum provision for partially-sighted students, feels that it is our responsibility to provide students with a wide variety of learning resources with which to pursue independent study. Suggested are teacher created materials, automated learning devices, a diversity of books, laboratory equipment and new and better audio-visual aids.

Bateman (1963), Karnes and Wollersheim (1963), and Davis (1962) found that, as a group, partially-sighted students are of average intellectual ability. Karnes and Wollersheim (1963) found partially-sighted students, as a group, were not achieving in reading at a level commensurate with their ability. Barraga (1963) feels that the majority of partially-sighted students are eager for the opportunity to improve their reading skills. Skiffington (1966), working with normally-sighted students, found that the experimental group in listening training made significant gains in reading achievement.



Karnes and Wollersheim (1963) state that partially-sighted students seem to have difficulty in obtaining meaning from visual-linguistic stimuli. This suggests that teachers of the partially sighted should incorporate into their instructional methods an approach which provides opportunities to respond through a combination of the visual, auditory, and motor channels. Such an approach could capitalize on the strengths of partially-sighted students in the auditory and vocal areas and use these strengths to compensate for the weakness in the visual and motor areas.

Karnes and Wollersheim (1963) suggest that some partially-sighted students need a clinical type of teaching, utilizing special methods and techniques to facilitate achievement commensurate with their ability. Foulke, Amster, Nolan and Bixler (1962) in a study with blind children using compressed speech, felt that if the subjects were given experience in listening they could have comprehended the material better.

Bixler and Foulke (1963) found a saving in listening time was possible with inexperienced listeners. Loss in retention, as in initial comprehension, will be eliminated with training in listening comprehension to rapid speech. Bixler and Foulke (1963) found good comprehension remained at essentially twice the normal speaking rates and emphasized the potential trainability of comprehension at higher rates.



Nolan (1963) states ". . . in the absence of braille text materials, . . . use of the auditory channel predominates through the media of live readers and recorded texts" (p. 313).

Morris (1966) suggests that the possibility of using recorded material, rather than printed or embossed, in some phases of the education of the partially sighted is an intriguing concept. From a strictly practical approach, recorded materials have the advantage over nonrecorded material in the time saved by their use. Use of recorded material could provide a partial solution to the time discrepancy problem, since recorded word per minute rate is approximately twice the high school braille reading rate and about three and a half times the elementary school braille reading rate. Nolan (1959) also found this to be true for partially-sighted students in using large type texts. Its use would diminish the difference between the time required by sighted and visually handicapped students to study a selection (Morris, 1966).

Morris (1966) suggests that there are several practical advantages in the use of recorded materials. Some advantages listed by Morris are:

1. Simultaneous use by many partially-sighted students which reduces unit cost.
2. Initial cost of recorded books is less than either braille or large type books.



3. Recorded books take up less storage space than do bound books.
4. Recorded texts provide access to the content of a curriculum for those students who have difficulty in learning to read.
5. Recorded books would be particularly valuable to older students who lose their sight and never master braille.
6. Earlier use of recorded material prepares students for the mode of study which is common to most college situations.
7. Technical improvements have overcome many of the problems once encountered (p. 8).

In a recent study conducted by the Department of Educational Research, American Printing House of the Blind, using 1152 subjects, half of whom were blind and half of whom used large print, from 11 public school systems and 18 residential schools spread from the Atlantic to the Pacific, Morris (1966) found listening proved to be the more efficient way to learn academic material.

A concern frequently brought up by teachers involving the use of recorded material is that its use might cause students to lose their reading skill, most particularly, their braille-reading skills. The American Printing House study found note-taking to be a critical part of the process of studying from recorded materials. Apparently, it is even more necessary for students to take and make use of notes when using recorded materials than when studying by reading. Such constant use of a skill would hardly provide an opportunity for it to be reduced.



### Listening in Education

There is little disagreement among teachers and psychologists about the importance of listening in human learning and communication (Russell, 1964). The spoken word has been important to mankind. Illiterate societies use it solely as the bridge to the next generation of the knowledge needed for survival. Civilized people use word of mouth as the most widely used language function (Carpenter, 1965). Listening skill is of major importance today in personal, social, economic and civic affairs. Habits of listening may have tremendous influence upon children's learning and the decisions they make (Wilt, 1963).

Listening has never been treated as though it had a substantial content of its own (Frazier, 1966). It has received relatively little attention in research and teaching (Carpenter, 1965).

Frazier (1966) writes:

The past twenty-five years have seen an enormous growth in listening audiences. Today 92 per cent of the households in the United States have television sets before which children of elementary and junior high school age spend, on the average, three hours a day. The impact of what is now called 'the simultaneity of human experience,' is both worldwide and incalculable. The concept of 'the image,' its development and dissemination, is a common place in the larger culture if not in the classroom.

The neglect of listening may be said to be matched by an increased need for attention to it. Teachers, attempting to decide whether they should deal more fully with listening skills and, if so, in what ways, are impelled by their awareness of this need, but are handicapped in their search for guidance by our having failed



to regard listening as a field worthy of professional study. Although there are some guide lines, teachers must, for the most part, make their own paths (p. 29).

Even though the social and educational significance of listening has received increased attention for more than a decade it is disturbing that few articles report the results of research (Petty, 1962). Strange and unexplainable as it may seem, despite the recent upsurge of interest, research in the field of listening has advanced at a languorous pace. Note, for example, the singular similarity of statements in this connection spanning a period of fourteen years. Wiksell (1946) wrote:

Very little research has been done to define listening per se, except that there is an agreement as to its importance, a need for and adequate ability in this skill, and that it should occupy an important place in the educational program (p. 505).

Caffery (1955) observed that: ". . . listening research is in its infancy: it has perhaps been so obvious a problem as to have been overlooked" (p. 132). Hackett (1955) evaluated the available research and stated:

It can be demonstrated that we know almost nothing about listening outside of the field of acoustics; the valid studies number less than 20 compared, for example, with the probably 3,000 about reading (p. 349).

Keller (1960) reviewed the literature and concluded that "a look at research in comparable fields (e.g., reading, speaking) makes listening research look embryonic" (p. 29). Discussing dissertations dealing with research on the various aspects of listening, Duker (1963)



listed only three classics in the field: Rankin, 1926; Nichols, 1948; Goldstein, 1940. He suggests four others that deserve special note: Dow, 1952; Hall, 1954; Gray, 1958; Carver, 1934. Petrie (1964) stresses that we are still in the formative stages of our investigation and suggests we curb our enthusiasm with reasonable skepticism. Ross (1964) states that "relatively little research is available on the factors that contribute to listening ability" (p. 369).

Additional confirmation of the lack of listening research is disclosed by the comparative insignificance of space accorded the subject in major educational reference works. For example, The Fourth Mental Measurements Yearbook, 1953 (Buros, 1953), devoted fifty-four pages to the description and discussion of sixty tests of reading skills, while there appeared no mention of listening. Six years later, The Fifth Mental Measurements Yearbook, 1959 (Buros, 1959), allotted seventy-eight pages for the description and discussion of eighty-four tests of reading skills, while only five pages were assigned to two tests of listening. Further, The Encyclopedia of Educational Research, third edition, 1960 (Harris, 1960), devoted forty-nine pages to reading research, and less than three full pages to listening.

Although the importance of listening is acknowledged at every developmental level, the research attack on the existence and nature



of listening ability and on ways of learning and improving it has been sporadic, atomistic, and inconclusive. Such is often the nature of individual research studies, and it may be that true progress is slow progress (Russell, 1964).

#### The Need for Instruction in Listening

Historically, the first studies of listening pointed out its importance in and out of school. Rankin (1926) conducted an investigation which indicated that of the time devoted by Americans to language use each day, 42 per cent was spent in listening to spoken language; 32 per cent in talking; 15 per cent in reading; and 11 per cent in writing. Rankin (1930) replicating his work reported similar and even more confirming results, indicating 47 per cent of communication time spent in listening to spoken language, 28 per cent in talking, 17 per cent in reading and 7 per cent in writing. He reported that:

The most striking is the importance of oral language (74 per cent in all). Talking occurs three times as much as writing, and listening three times as much as reading . . . . listening, or the ability to understand the spoken language, is used in life three times as much as reading, but receives less than one-sixth as much emphasis in school.

To me the evidence suggests that we should go still further; that we should devote a still larger proportion of language time to the development of skill in talking and particularly in listening (p. 179).



With the growing awareness of the importance of the process of hearing and interpreting spoken language, an increasing amount of attention has been devoted to it. One example of this type of attention is an investigation conducted by Wilt (1950). She sent questionnaires to 2,161 teachers in forty-seven states, and 1,452 were returned (67 per cent). Teachers estimated the amount of time that children learn by reading, speaking, listening and writing. They ranked the four skills in order of their seeming importance. The results of the questionnaire are quoted as follows (p. 628).

TABLE I  
RANK OF SKILL IN IMPORTANCE

Skill	1	2	3	4	Total
	Percent	Percent	Percent	Percent	Per cent
Reading	61.8	18.7	18.5	1.0	100
Speaking	21.9	33.7	37.3	7.0	100
Listening	16.0	42.7	28.4	12.9	100
Writing	.3	4.9	15.8	79.0	100

The teachers estimated that children learn through reading 110.4 minutes in an average school day; through listening, 77.8 minutes; through speaking, 69.2 minutes; and through writing, 52.0 minutes. Some of them, 29.5 per cent, felt that listening was the most important skill within certain activities. Reading was credited with being generally most important.



Wilt then visited nineteen elementary classrooms for one day each, observing a total of 530 children. Findings from the observations made by Wilt, differed from the teachers estimates as follows:

1. The median daily listening times for 530 children was 158 minutes.
2. Children listened to the teacher talk, asked questions, took part in discussions, and carried on conversations with individual children, 86.3 minutes (54 per cent) of the total listening time.
3. Children listening to each other, 49 minutes (31 per cent) of the total listening time.
4. Children listened to the teacher almost twice as much as they listened to each other (p. 633).

During the school day, children spent 57.5 per cent of their time in listening, 42.5 per cent otherwise engaged. Of the listening time, 54 per cent of it was spent listening to the teacher, 31 per cent listening to other children and 15 per cent in other types of listening (radio, films, etc.).

Cartier (1952) found that 60 to 70 per cent of the time in school involved listening, with one-half of the school listening time being devoted to listening to the teacher. Cartier also found, that 50 per cent of the tenth-grade pupils comprehended only about 25 per cent of what they heard. Thus, if pupils are to spend this much time listening, teachers must recognize its importance, and should train future citizens to listen more effectively, through training, for specific listening purposes.



To train students to listen more effectively, teachers must be aware of the factors involved in the speaking-listening situation. Nichols (1949) in a study of the listening ability of University of Minnesota freshmen, stated that there are many factors that influence over-all listening comprehension. He indicated that these multiple factors are: intelligence, reading comprehension, recognition of correct usage, size of the listening vocabulary, emotional adjustment to the speaker, speech effectiveness, admiration for the speaker and experiences in listening.

Rankin (1930) constructed a listening test based on situations common to elementary school children. He found that scores on his listening measure correlated .67 with Detroit Alpha Intelligence Test scores. A study by Goldstein (1940) reported a correlation of .72 between scores on the Otis General Abilities Test and listening measure scores.

#### Interrelationship of Reading and Listening

A factor of interest to researchers is that of the relationship between reading and listening ability. One of the early studies was conducted by Erickson and King (1917). Lesson material was presented both visually (through silent reading), and orally. Conclusions of



this research indicated that auditory lesson presentation was, in general, the more effective means of presentation.

Russell (1928) compared pupils in the fifth, seventh and ninth grades on ability to learn by visual and oral means. He employed three groups, matched for intelligence at each of the three-grade levels. Russell then presented oral material to one group while the second read the same lesson for an equal amount of time. The third group read the lesson twice with no time limit imposed. He concluded that the auditory method of presentation was superior at the seventh-grade level, and the visual method was slightly superior at the ninth-grade level.

An extensive research investigation conducted by Goldstein (1940) reported a correlation of .78 between listening and reading comprehension. Goldstein concluded that a student who possesses normal hearing ability and scores considerably higher in reading than in listening might need formal instruction in developing auditory skills. On the other hand, he stated that students obtaining low scores in both reading and listening may have both visual and auditory defects, and/or low intelligence.

A further exploration of the relationship between reading and listening ability was conducted by Caffery (1955). From this investigation, he was able to state the following generalizations:



(1) when reading ability is high, there is a tendency for auding ability to be high; (2) when auding ability is low, reading ability tends more often to be low; (3) when auding ability is high, reading ability is not predictable; (4) when reading ability is low, auding ability is not predictable.

In examining the relationship between scores obtained on the Brown-Carlson Listening Comprehension Test and a variety of reading measures, Brown and Carlson (1935) reported an average correlation of .34 for college students, and .57 for high school students and adults. This is similar to Blewitt's (1951) finding of .39, upon comparing the two methods of presentation, and also corresponds with the correlation of .46 reported by Nichols (1949).

One of the more recent studies, comparing reading and listening ability, was reported by Pratt (1956) who compared scores on the Iowa Silent Reading Test with scores on a self-constructed listening test. He obtained a correlation of .64. Other studies, that have found a positive relationship between reading and listening, are: Brown (1965), Fawcett (1966), Hampleman (1958), Hill (1962), Hollingsworth (1964), Hollingsworth (1965), Lundsteen (1964), Spearritt (1962), and Skiffington (1966).

The studies reviewed seem to suggest, on the basis of a positive correlation between reading and listening tests, that there is a



moderate relationship between listening ability and reading ability.

Certain patterns emerging from this research warrant additional generalizations. The most important of these is that individuals with superior reading ability appear to learn more efficiently with the visual method rather than the auditory means of presentation. Further, research findings appear to favor the effectiveness of the auditory method in presenting relatively easy learning materials, while indicating that the visual method is more effective in presenting difficult material.

#### Research Related to Listening

Lack of objective research in the area of measuring the effectiveness of listening instruction is apparent. This position was supported by Brown (1950) who stated:

... . the most complete bibliography on listening, a bibliography of slightly over a hundred references, does not list a single complete study that offers objective statistical evidence that listening can be taught. There are, to be sure, articles which suggest that it can and should be taught. There are even a few articles which describe how it is being taught, but the results are in general and subjective terms (p. 70).

More thought is being devoted to the process of teaching listening skills since Brown's report. This is verified by the increase in articles dealing with listening reported in educational journals during the last ten years. However, the research approach to problems



related to listening is still being neglected. For example, in the October, 1961, issue of Elementary English, a report (Burns and Troxel, 1961) of published language arts research in 1960 makes no mention of listening. Further, the March, 1961 issue of the same journal which contains a report of well over 200 research studies "under way or completed," lists a mere fourteen articles dealing with listening--and only three of these were concerned with the teaching of listening.

The Review of Educational Research, April, 1961, (Duker, 1961) was devoted to recording research in the language arts. In the chapter on "Listening," Duker stated that: "most studies during the academic school year 1961, were concerned with ways to teach listening skills" (p. 148). However, no actual research studies on the teaching of listening were cited in the April, 1961 Review of Educational Research.

Duker (1964) in the April, 1964 Review of Educational Research, stated:

Listening is no longer considered a peripheral aspect of the communicative process. During the past three years, a large body of research dealt with this topic. Master theses and doctoral dissertations, during this time, have shown an improvement in quality. Research on listening showed a greater degree of creative excellence. The better studies compare favorably with good research in any field (p. 156).



He cited ten articles and three bibliographies on "Listening" as worthwhile in the field of listening.

Researchers have been concerned about the improvement of listening skills. Because of this concern a limited amount of research has begun to accumulate, not only at the college level, but at the secondary and elementary school levels as well.

Investigation into listening improvement through specific training received some stimulus as a result of the research completed by Nichols (1949). Utilizing 200 college freshmen at the University of Minnesota, Nichols concluded that components involved in listening comprehension can be improved. He suggested that the best probable means for improvement is that of training.

Brown (1954) also investigated teaching of listening at the college level using a group of University of Minnesota freshmen. Twenty-four students were involved in the experimental group, whereas twenty-four control students received no instruction in listening. The Brown-Carlson Test, administered prior to the experiment, ascertained that both groups measured below the twenty-ninth percentile in performance. At the conclusion of the study, the experimental group showed a gain of thirty-three percentile ranks, as compared with a gain of sixteen percentile ranks in the control group. Brown reported this difference as being significant at the .01 level.



Recent research endorses the view that training in listening will improve the listening skills of the recipients. Examples of supporting studies are: Brillhart (1965), Brown (1950), DeVito (1965), Furbay (1965), Haberland (1959), Heilman (1952), Hill (1962), Irvin (1954), Karraker (1952), Orr (1965), Putt (1964), Still (1955), and Tezza (1962).

The major share of qualitative and quantitative research in listening has been conducted at the secondary and college levels; relatively little definitive research has been completed at the elementary school level. Early studies suggested the possible values of direct instruction in listening. A second round of research studies, still in progress, is yielding unequivocal evidence that planned instruction results in improved listening abilities.

With regard to listening improvement among younger subjects, Pratt (1956) used twenty sixth grade classrooms, assigned at random, to the experimental group and twenty sixth grade classrooms as a control group. He administered the Pintner General Abilities Tests, Verbal Series, and the Iowa Silent Reading Comprehension Tests prior to instruction. Because of the lack of an adequate measuring device in listening for use at this grade level, the author had to devise pre- and post listening tests. He then proceeded to instruct each



class in the experimental group in the application of listening skills for a period of five weeks. Pratt concluded that:

1. Teaching listening ability via instruction directed toward the skills involved could be effective.
2. Many of the skills inherent in the listening process were complex and needed to be developed gradually.
3. Children should not be expected to master these skills in a five-week period.
4. The effectiveness of instruction in listening was independent of varying levels of intelligence.
5. There was some indication that instruction was more effective with certain listening skills, but the small sampling of items on each skill, limited the reliability of any statement that might be made in support of a specific skill. If each skill were made the subject of a longer period of instruction and a larger number of test items, more precise information would become available on this phase of the problem.
6. The correlation between listening ability and intelligence was found to be positive (.60) (p. 319).

Sister Mary K. Hollow (1955) used fifth grade pupils in sixteen mid-western parochial schools to determine whether a planned program of listening instruction would improve the listening abilities of these children. She, too, had to construct pre- and post tests of listening ability because of a lack of measuring devices in listening at this grade level. She matched 100 pupils in the experimental group with 100 pupils in the control group on the basis of initial listening ability, intelligence and chronological age. Daily listening lessons



were then given to the experimental group for six weeks. Hollow's findings revealed that:

1. Listening skills were appreciably improved by a planned program of instruction. The experimental group showed a mean score gain of 7.88 points while the control group showed a mean score gain of 1.56 points. Differences were significant beyond the .01 level.
2. Children with low, average and high intelligence benefitted substantially from systematic instruction in listening comprehension.
3. Sex of the child and size of the family did not seem to be related to listening ability. The boys involved in the experiment attained a mean initial listening score of 33.17 and the girls a mean score of 32.71. The difference between mean scores was not significant (p. 161).

Hogan (1953) divided fifth and sixth grade pupils into experimental and control groups and provided the experimental group with a series of listening lessons. The findings indicated:

1. The experimental group showed marked improvement over the control group.
2. Teachers of the experimental group noted a definite gain in the listening skill of their classes. (Children followed directions better, adhered to main points of a discussion, gained in ability to take notes and asked more pertinent questions).
3. Teachers of the experimental group noticed an improvement in the preparation and presentation of talks and in panel discussions (p. 165).

Canfield (1961) conducted a study at the intermediate grade level. His procedures included administration of a standardized



pre- and post test of listening ability. Twelve direct lessons (listening for a purpose) were taught to two fifth- grade classes over a period of six weeks. Twelve indirect lessons (no purpose stated) were taught to two fifth- grade classes over the six week period. A control group received no planned instruction in listening, but participated in the regular language arts program. Canfield's findings indicated:

1. The listening comprehension of fifth- grade pupils can be improved significantly by instruction which emphasizes direct instruction and practice in listening for main ideas and important details.
2. Careful planning of listening experiences can bring about significant listening improvement without direct teaching of listening skills.
3. School and classroom differences can significantly influence the effectiveness of the method used. The nature of previous reading instruction, the classroom atmosphere for learning, and the formality of the language arts program may well contribute to the effectiveness of the experimental methods.
4. Listening comprehension is more highly related to report- card grades than it is to intelligence or reading ability.
5. There is increasing evidence that certain aspects of listening and reading are directly comparable. However, the size of the correlation indicates that there are factors involved in listening which are not measured by a reading test.
6. Neither reading scores nor I. Q. scores are good predictors of a pupil's ability to listen (p. 150).

Edgar (1961) matched two groups of fourth, fifth, and sixth- grade children. The experimental group had ten half-hour recorded lessons, and the control group read the same material and answered



the same questions. The instructional materials included the use of analogy, exposition, vocabulary practice, and the "story" approach. Post test results, eight weeks after pre-test, showed that all instructional materials contributed to significant general gains, but that material using analogies seemed to be the best of the devices used.

Devine (1961) used two matched groups of pupils at the ninth-grade level using lessons designed to improve critical listening abilities. Critical listening was defined in terms of recognizing the bias of a speaker, determining the competence of a speaker, distinguishing between fact and opinion, and discriminating between report and emotive language. Similar to results in other studies, Devine found a statistically significant gain by the experimental group, and a superior gain by the experimental group compared to the control group.

A study by Lundsteen (1964) involving 263 pupils in the fifth and sixth-grades, in control and experimental classes, also gave some indirect evidence of gain in critical listening abilities as part of general listening ability and distinct from general verbal ability. Lundsteen's findings were:

1. The lessons given the experimental group were effective in improving listening abilities. Significant differences were found between the experimental and control groups at the .01 level of confidence.



2. Test data showed that critical listening scores for the sixth-grade surpassed the fifth-grade.
3. Girls appeared to be better critical listeners than boys. Significant differences were found at the .05 level.
4. Evaluation of weekly-lessons--pupils' and teachers' reports---showed substantial evidence of transfer and general satisfaction with the nature of the lessons (p. 746).

In a follow-up study, after a year's lapse of time from the original study, Lundsteen (1965) found that the retention of skill in critical listening and the practical significance, in terms of transfer of training to other in-school and out-of-school activities appeared to favor instruction as practiced in this experiment.

Fawcett (1966) used 638 pupils in the fourth, fifth and sixth grades, divided into experimental and control groups. Listening exercises were presented for twenty-five minutes per day, three days a week, for a period of fourteen weeks. Listening exercises were presented by two methods: (1) teacher-presented listening exercises, and (2) tape-presented listening exercises. Fawcett's findings were:

1. Students, who receive listening instruction, evidence significant improvement in listening ability, whereas, those students who do not receive such instruction do not.
2. Listening ability is a skill which can be improved through instruction.
3. Listening ability is significantly related to several curricular areas of the school, especially reading, language and arithmetic.



4. Boys and girls do not differ significantly in listening ability.
5. Reading comprehension is significantly related to listening ability.
6. Children's ability to use reference materials is significantly related to listening ability and the degree of relationship is higher than between listening ability and language use.
7. A child's report-card grades in reading, language and arithmetic are not as closely related to listening ability as scores obtained on standardized achievement tests in each of the respective areas (p. 476).

Skiffington (1966) used eighth-grade pupils and presented twenty-six auding exercises which were pretaped and administered at a rate of three per week for nine weeks. He found a significant gain in auding and reading achievement.

Other studies that indicate listening skills can be improved through instruction are: deHoop (1965), Foulke, Amster, Nolan and Bixler (1962), Hollingsworth (1964) and (1965), Peisach (1965), and Van Wingerden (1966).

The research suggests that listening skills can be improved through instruction. The formal instruction period in listening in the studies reviewed extended from five weeks to fourteen weeks. Examination of Pratt's (1956) conclusions implies that, although gains can be made in listening skills, five weeks of instruction is not sufficient time to expect permanent improvement. Few of the studies used a standardized instrument for the pre- and a post test. Only



one study involved a follow-up after a lapse of time to see if the gains in listening were permanent (Lundsteen, 1966). It would seem the assumption, that instruction can improve the listening skills of school children, needs further investigation. This conclusion is supported by the following statement of the National Council of Teachers of English, Commission on the English Curriculum (Frazier, 1966):

Most teachers will agree that there are skills in listening that do need development. How much and in what ways--these are questions which need a good deal more consideration (p. 30).

In a similar vein, Ashcroft (1966) points to some needs for research in educational programs for partially-sighted students. Needs are noted such as:

. . .(1) human engineering approaches to the development of aids and teaching materials (matching tangible apparatus to human factors rather than adapting persons to machines).

(2) application of technological development (reading machines and guidance devices).

(3) evaluations of teacher and program effectiveness and teacher preparation.

There is a need for a new era in research to match the new era in education (p. 88).

The National Society for the Prevention of Blindness, Committee on Education of the Partially Seeing (1963) states its purpose as . . . "developing plans for research, that will yield a more scientific basis



for meeting special educational needs of partially-seeing children'" (p. 99).

### Summary

This chapter presented a review of representative literature related to the framework of the present study. The literature has been classified into five categories: (1) education of the partially-sighted student, (2) listening in education, (3) the need for instruction in listening, (4) interrelationship of reading and listening, (5) research related to listening.



## CHAPTER III

### PROCEDURE

The purpose of this chapter is to provide an exposition of the premise of the study and a discussion of the development and application of listening lesson materials, apparatuses and procedures.

The chapter is divided into the following headings:

1. Premise of the Study and Hypotheses
2. Sample
3. Listening Lesson Courses
4. Adaptation of the S. T. E. P. Listening Test
5. Collection of Data
6. Statistical Procedures

#### Premise of the Study and Hypotheses

Leading educators of the partially sighted have been aware of the need to emphasize listening to make up for the visual loss. A number of educators have expressed the opinion that listening skills of the partially sighted could, and should, be improved with instruction.

A review of the literature found that little has been done in a sequential



manner to improve the listening learning area with partially-sighted students.

The basic premise of this study was that:

Partially-sighted students who received special instruction in listening comprehension would show improvement in this learning area.

### Hypotheses

Objectives of the study were examined by means of null hypotheses which assert the absence of significant differences between groups and usually are formulated for the express purpose of being rejected. If a hypothesis is rejected, the alternative hypothesis may be held tenable (Garrett, 1964).

As an outgrowth of the objectives stated in Chapter I, the following specific null hypotheses were formulated and tested:

Hypothesis 1: Comparison of mean pre-test and post test scores of partially-sighted students who received special instruction in listening comprehension and partially-sighted students who did not receive special instruction in listening comprehension will result in no significant differences.

Hypothesis 2: There will be no significant differences between the mean listening comprehension scores of partially-sighted students who received special instruction in listening comprehension and those



of partially-sighted students who had not received special instruction in listening comprehension.

Hypothesis 3: There will be no significant differential effect between means resulting from two types of listening comprehension instruction.

### Sample

The partially-sighted students included in this study conform to the interpretation of a partially-sighted student as defined by the National Society for the Prevention of Blindness. Partially-sighted students are defined as those who:

- a. Have visual acuity between 20/70 and 20/200 in the better eye after the best possible correction, and who can still use sight as their chief channel of learning.
- b. In the opinion of the eye specialist, can benefit from either temporary or permanent use of appropriate special facilities.
- c. Are enrolled in a regular classroom full time and served by an itinerant teacher two or three times a week, or are enrolled in a special class for partially-sighted students at a residential school for the blind.
- d. Are of at least normal or dull normal in intellectual ability. (Pelone, 1957, p. 3).

The sample for this study was drawn from the partially-sighted students in grades four through nine served by the itinerant teachers of the Tacoma Public Schools, Tacoma, Washington, and the partially-sighted students enrolled in grades four through nine in special



classes for the partially sighted at the Oregon School for the Blind, Salem, Oregon.

The technique of "random stratified sampling" (Garrett, 1964) was employed for the following reasons: (1) inability to obtain valid I. Q. scores for the partially-sighted students involved, (2) a rather large age range included in the sample, (3) subjects obtained from two sources, (4) varying degrees of visual acuity, and (5) anomalies of the eye that varied a great deal.

The sample of partially-sighted students who met the criteria stated above amounted to forty-two from the Tacoma Public Schools and twenty-one from the Oregon School for the Blind. The sample totaled sixty-three.

The "random stratified sample" technique (Garrett, 1964) was used to divide the partially-sighted students into two experimental groups and one control group. Special attention was given by the experimenter so that membership in each group consisted of fourteen partially-sighted students from the Tacoma Public Schools and seven partially-sighted students from the Oregon School for the Blind.

#### Description of the Sample

The sample of 63 partially-sighted subjects was composed of 13 fourth graders, 5 fifth graders, 6 sixth graders, 17 seventh



graders, 14 eighth graders, and 8 ninth graders. Table II shows how they were placed in the experimental and control groups.

TABLE II  
COMPOSITION OF THE EXPERIMENTAL  
AND CONTROL GROUPS

	Group I (My Weekly Reader Listening Comprehension Paragraphs)	Group II (SRA Listening Lessons)	Group III (Control)	Total
4th Grade	5	4	4	13
5th Grade	2	1	2	5
6th Grade	2	2	2	6
7th Grade	5	6	6	17
8th Grade	4	6	4	14
9th Grade	3	2	3	8
Total	21	21	21	63

Employing a "random stratified sampling" technique (Garrett, 1964) in the organization of the three groups resulted in their being closely equated on the basis of grade level.

Table III presents the mean grade level and standard deviation for each group and for the total sample.

Table IV presents the characteristics of the sample with respect to chronological age. The standard deviations show a very similar cluster of CA around the mean age level for the total group, suggesting three similar distributions.



TABLE III  
MEAN GRADE OF SAMPLE

Group	N	Mean Grade Level	S. D.
I - (My Weekly Reader Listening Comprehension Paragraphs)	21	6.98	1.13
II - (SRA Listening Lessons)	21	7.31	1.72
III - (Control)	21	7.32	1.67
Total Sample	63	7.10	1.73

TABLE IV  
AGE RANGE OF SAMPLE

Group	N	Age Range	Mean Age	S. D.
I - (My Weekly Reader Listening Comprehension Paragraphs)	21	10-16	13.6	1.7
II - (SRA Listening Lessons)	21	11-17	14.8	1.93
III - (Control)	21	10-17	14.6	2.07
Total Sample	63	10-17	14.3	1.96

Table V presents the composition of the sample with respect to sex. The distribution of boys and girls in the total was 44 boys (70 per cent) and 19 girls (30 per cent). Although it would have been



category includes anomalies which occurred only once. These miscellaneous anomalies were: Retinoblastoma, Retinitis Pigmentosa, Aphakia, Dislocated Lens, Eye Surgery, Photophobia, Enucleation, , and Hyperopic.

TABLE VI  
EYE ANOMALIES

Anomaly	Incidence
Congenital Myopia or Myopia	8
Retrobulbar Fibroplasia	12
Nystagmus	7
Congenital Cataracts	7
Optic Atrophy	4
Macular Agenesis	3
Retina Detachment	3
Strabismus	2
Albinism	2
Astigmatism	2
Miscellaneous	8
None Stated	16
Total	74*

\*The table on eye anomalies totals 74 because, of the 63 subjects, seven had two eye anomalies, two had three anomalies.

The eye anomalies listed in Table VI and visual acuity range in Table VII tend to confirm the findings of Nolan (1959) that . . . 'partially-sighted children are quite heterogeneous in regard to visual disability and visual acuity.'



Table VII shows that <sup>2</sup> 37 students (43 per cent) had a visual acuity of better than 20/100 in the better eye after refraction, but were enrolled in the program for the partially-sighted because they had other eye difficulties than that of visual acuity. Thirty-six (57 per cent) had a visual acuity of 20/200 or less in the better eye after refraction, but since they had a considerable usable vision, they were placed in the program for the partially-sighted rather than the program for the blind.

TABLE VII  
VISUAL ACUITY RANGE

Visual Acuity	Number
20/70 or better	10*
20/100	17
20/200	23
20/300	12
20/400	1
Total	63

\*See p. 37, item b for an explanation of why these subjects are appropriate for inclusion in the sample.

Listening Lesson Courses

In order to approach the problems posed in the present investigation, it was necessary to develop:

1. Listening Lessons
2. Listening Lesson Answer Sheets



3. Listening Lesson Answer Check
4. General Procedures for the Listening Lessons

### Listening Lessons

Objectives of this study proposed in part, that two types of listening comprehension instructional material should be used with two experimental groups in order to test the differential effect of two types of listening comprehension instruction.

Listening comprehension lessons have a content of informative, factual or enjoyable material for students. These materials are of paragraph or short story length. However, existing listening materials proved to be too short for the intended listening comprehension instructional period of this study; or they were constructed in such a way that the content material would be inappropriate for the grade levels included in the study (fourth through ninth). Thus the writer found it necessary to edit and combine existing materials in order to develop appropriate listening lessons. Published instructional material, previously used to teach listening comprehension, was obtained from three sources. This material was from My Weekly Reader - Listening Comprehension Paragraphs, Editions 4th, 5th, and 6th, (1966); Common Sounds, as recommended by Dr. Russell (1959); and the SRA - Listening Skill Builders, included with the SRA Reading Laboratories IIa, IIb, IIc, (Parker, 1961).



Two listening lesson sequences were developed from this material and were then named as to their chief source. Thus one sequence was called My Weekly Reader Listening Comprehension Paragraphs (MWR) and the other was called SRA Listening Lessons (SRA). (See sample copies MWR in Appendix A and SRA in Appendix B).

Both sequences contained an introductory lesson followed by nineteen lessons of fifteen minutes duration. Each lesson contained three parts: a presentation time, a comprehension check (with multiple choice answers), and an answer check. The material emphasizes main thought or idea, specific word meanings and general comprehension.

Two lessons in listening comprehension were presented each week for ten weeks. The lessons were limited in time and number weekly in order to fit the schedule of the itinerant teachers who were presenting the sequences to the experimental groups. Many partially-sighted students meet with the itinerant teacher only twice a week for special instruction.

American Education Publications, Inc. make this statement about My Weekly Reader Listening Comprehension Paragraphs (Johnson, Singleton, and Wonsavage, 1964):

The Listening Comprehension Paragraphs are graduated, increasing in length, quality and complexity from grade to grade.



Use them regularly to improve the listening abilities of your pupils (p. 15).

Johnson (1959) in Curriculum Letter Number 41, entitled "The Improvement of Listening Skills," suggests some "Tips for Listening". They are as follows:

1. Tie in listening improvement with everyday listening.
2. Make pupils "sound conscious."
3. Give listening tests.
4. Analyze pupils' listening habits.
5. Give listening exercises on a graduate scale.
6. Make certain that pupils know why they are to listen, what they are to listen for, and how they are to listen.
7. Teach listening directly and indirectly.
8. Don't expect complete learning in one presentation.
9. Remove potential distraction to good listening and help pupils adjust to those that cannot be avoided.
10. Develop criteria for good listening habits (attention, quiet, courtesy) (p. 4).

The MWR were organized into four parts, each part averaging about 160 words in length. Part I, II, and III were followed by four multiple-choice questions. Part IV differed in that four questions were asked and the students had to write a word or phrase that answered the question. Each group of questions emphasized:

(a) comprehension (comprehending a fact in context), (b) vocabulary



(selecting the right definition for a word in context), (c) interpretation (interpreting facts given and drawing inferences from them), (d) generalization (determining the main idea by selecting a title).

Science Research Associates, Inc. Reading Laboratory offers a multi-level, individualized, developmental program of basic reading instruction. Parker (1961) states the following with regard to the SRA series:

The Listening Skill Builder program is designed to provide an introduction to, reinforcement of listening skills, and to develop auditory attention span and listening comprehension (p. 2).

The SRA sequence was organized into two parts, each part averaging about 300 words in length, followed by a comprehension check consisting of from six to ten multiple-choice questions. Development of auditory-attention span and listening comprehension were emphasized by the use of T, Q, L, and R. T is for tune-in; Q is for questions; L is for listen; and R is for review.

#### Listening Lesson Answer Sheets

Past criticisms of Listening Lessons have been that the answering sheets, forms or booklets are a mixed measure of both reading and listening. Wilson (1960) suggested that many of the printed items on the answer sheets can be responded to by pupils who have not heard the oral materials. To overcome this criticism,



and to provide also a simple answer sheet for partially-sighted students to use, a special answer sheet was constructed. All reading was eliminated by listing only the question number, followed by capital letters A, B, C, and D, representing the multiple-choice answers. A Primary Type typewriter was used for producing this answer sheet. (See the sample copy of the MWR Answer Sheet in Appendix C and SRA Answer Sheet in Appendix D).

#### Listening Lesson Answer Check

Following the presentation of all parts of either the MWR or the SRA there was an answer check. It consisted of: (1) repetition of the original questions, (2) giving of the correct letter answer, (3) giving the correct phrase to complete the statement or a correct answer to the question. This procedure was used in an effort to reinforce the correct responses the students had made earlier.

#### General Procedures in the Listening Lessons

In both Listening Lesson Sequences, each Listening-Lesson question or statement read was followed by a fifteen-second pause to allow time for the partially-sighted student to make the appropriate answer choice.



Each Listening Lesson was tape-recorded by the experimenter to provide standardized conditions through maintenance of the same rate of presentation for each group (175 w. p. m.). Tapes were cut by use of a recent model tape recorder. Necessary copies were made by the Audio-Visual Department of the Tacoma Public Schools on new transcribing equipment, for use by the itinerant teachers involved in the study. Decibel level was also controlled for each group in order to enhance the standardization of conditions under which the Listening Lessons were administered. Classroom conditions enhancing the effectiveness of listening were discussed with the itinerant teachers involved in the study. Since the writer presented the Listening Lessons to the Partially-Sighted Class at the Oregon School for the Blind the conditions were essentially the same for each group.

#### Adaptation of S. T. E. P. Listening Test

The Cooperative Test Division of the Educational Testing Service, Princeton, New Jersey, published the Sequential Tests of Educational Progress in 1957. The tests, commonly known as the S. T. E. P., are a series of objective tests in the major academic areas. Listening is one of the tests developed as part of the communication area. Forms 3A and 3B of the S. T. E. P. are the



pre- and post test criterion measures of listening skill used in this study. The publisher stated that these two forms are of equal difficulty.

According to the publishers, (Berry, et al., 1957) the S. T. E. P. Listening Test

. . . measures ability, through listening to passages read by the teacher or test administrator, to comprehend main ideas and remember significant details, to understand the implications of the ideas and details, and to evaluate and apply the material presented. Materials include directions, and simple explanation, exposition, narration, and aesthetic material (both poetry and prose).

Each form of the test consists of thirteen selections varying from sixty-three words to 600 words in length. These selections are read aloud by the examiner at a recommended rate of approximately 120 words per minute. After each selection, questions are read to the pupils who record their answers on prepared answer sheets. Each child has a printed copy of the possible answers to the multiple-choice type questions. Approximately one-half of the selections are derived from specific listening situations, and are representative of the listening activities in the school curriculum. Other materials and selections represent materials that might normally be read aloud to a listening audience (p. 7).

To overcome the criticism that this test is a mixed measure of both reading and listening (Kelly, 1965) and (Wilson, 1960) a special answer sheet was developed for this study. It was similar to the answer sheet for the Listening Lessons. Virtually all reading was eliminated. Each question was numbered and the multiple-choices were represented by rectangles labeled A, B, C, D, or F, G, H, and I, whichever was appropriate for the questions asked in the test. The answer sheet was enlarged to facilitate use by partially-sighted students, and to reduce any effect the visual handicap might have



on the results of the listening test. The student only had to darken the rectangle representing his answer choice. (See S. T. E. P. Listening Test Answer Sheet, Appendix E).

The S. T. E. P. Listening Test, Forms 3A and 3B were tape-recorded by the experimenter in order to control the rate of presentation for all subjects (120 w. p. m.). Procedures used in recording the Listening Lessons were followed in recording the S. T. E. P. Listening Tests Forms 3A and 3B.

General directions for the S. T. E. P. Listening Test Forms 3A and 3B were modified slightly to adapt to the changes arising from the modified answer sheet. (See Appendix F).

#### Collection of the Data

The procedures observed in the collection of data are described and discussed under the following headings:

1. Administrative Preparations.
2. Administration of the S. T. E. P. Listening Test 3A as a pre-test.
3. Presentation of the Listening Lessons.
4. Administration of the S. T. E. P. Listening Test 3B as a post test.



### Administrative Preparations

This study is based on the assumption that a major avenue in the educational process is continuous teacher-pupil contact. It was considered worthwhile that the regular itinerant teacher of partially-sighted students be responsible for the listening comprehension instruction.

Regular classroom teachers in the Tacoma Public Schools who were teaching subjects in the control group were not informed of the present study to improve listening comprehension. This procedure was used so that, as much as possible, subjects in the control group would receive only their regular classroom instruction during the period of the study. It was not possible to conceal the purposes of the study from the teachers of the seven subjects drawn from the Oregon School for the Blind.

A meeting was held with the Tacoma Public School itinerant teachers of partially-sighted students who were in the experimental groups. An orientation program was conducted to explain the purpose of the study, and to present the procedures to be used in the pre- and post test S. T. E. P. Listening Tests. Typical selections from the S. T. E. P. Listening Test were presented, along with the modified directions and answer sheet. A sample Listening Lesson and answer sheet were presented. All teachers responded with enthusiasm to



be part of the study as they recognized the need for such instruction with the partially-sighted student.

A second meeting was held after the pre-testing had begun. The most difficult problem seemed to be scheduling enough time for completion of the pre-test. At this time it was decided for students having difficulty completing the test in one forty minute period, the pre-test could be presented in two consecutive sessions--a procedure suggested by the publisher.

A third meeting was held at the completion of the pre-testing period. A sample Listening Lesson and answer sheet were presented and procedures were discussed. Assignment of partially-sighted students to one of the two experimental groups and a control group was accomplished by the experimenter at this meeting.

Completion of the listening comprehension lessons was scheduled for May 13, 1966. This allowed one week for spring vacation. Post testing began immediately and was finished by June 3, 1966. A meeting held with the itinerant teachers after the post test brought forth only enthusiasm for the study.

As mentioned earlier, the Oregon School for the Blind was included in the study in order to increase the sample size. This School maintains classes for partially-sighted students who meet the criteria for the partially sighted of the National Society for the



Prevention of Blindness. They come from sparsely settled areas in Oregon where no special classes or services are available for the partially sighted. They are boarding students, who are encouraged to make home visits once or twice a month. They come from a heterogenous socio-economic background. These classes are taught by specially-trained teachers.

A meeting was held with the Principal, Mr. Donald Edwards in which the study was explained and the amount of involvement of students and facilities of the School were discussed. The experimenter assumed responsibility for presenting the pre- and post testing, as well as the listening comprehension instruction lessons. Pre-testing was begun February 11, 1966. The twenty-one subjects were assigned to two experimental groups and a control group. The Listening Comprehension Lessons were begun February 25, 1966, and extended through May 13, 1966. Two weeks, March 8th through March 18th, were not used in this study, as the first week was the annual festival week and the second week was spring vacation. Post testing was completed May 16th to May 20th, 1966.

Administration of S. T. E. P. Listening Test Form 3A - Pre-Test

The S. T. E. P. Listening Test Form 3A was administered as a pre-test to the experimental groups and the control group. As stated



previously, it was tape-recorded by the experimenter to have a standardized procedure.

Students included in the experimental groups were advised that they were involved in a research study on listening. They then were asked to give their best attention and cooperation to the test. Teachers were instructed not to give any special help during the test period.

The pre-test followed a format of: (1) the reading of a selection, (2) reading a series of multiple-choice questions and possible answers, (3) a pause of 15 seconds for the students to make their choice of answer. After completion of the tests, answer sheets were collected and turned into the experimenter for correction and scoring.

#### Presentation of the Listening Lessons

The MWR and the SRA sequences were presented by tape-recording. The MWR were presented to Experimental Group I. The SRA were presented to Experimental Group II. Group III, the control group, received no listening comprehension instruction. Two lessons, each of fifteen minutes duration, were presented weekly for ten weeks. The directions for answering the questions were repeated each time a selection was read. The answer sheets were collected by the teacher and returned to the experimenter. No analysis of the weekly lessons was attempted.



Administration of S. T. E. P. Listening Test Form 3B as a Post Test

The S. T. E. P. Listening Test Form 3B was tape-recorded by the experimenter for a standardized presentation and was used as the post test. Post testing followed the same procedures as in pre-testing. Answer sheets were collected by the teachers and returned to the experimenter for correcting and scoring.

Statistical Procedures

An analysis of variance was used on the pre-test data in order to establish that there were no significant differences among the three groups at the outset of the study. The null hypotheses were tested by use of "t" tests in order to examine for significant differences between means.



## CHAPTER IV

### PRESENTATION OF FINDINGS

The purpose of this chapter is to report the statistical results of the study as they relate to the hypotheses stated in Chapter III. Each hypothesis is restated, the statistical procedures which were used to test the hypotheses are reported and a conclusion is drawn for each hypothesis. In addition, the chapter includes limitations of the study and a discussion of implications for research and educational practice which are suggested by the results.

Table VIII presents the means and standard deviations of Groups I, II, and III, on the pre-test using the S. T. E. P. Listening Test Form, 3A. It is interesting to note the means varied a maximum of only 3.5 points and the standard deviations only 1.1 points at pre-test time, suggesting a high level of homogeneity among groups. An analysis of variance test established that differences between groups were non-significant. The obtained "F" ratio of .40 was well below the 3.15 required for significance at the .05 level. See Table IX.



TABLE VIII

PRE-TEST MEANS AND STANDARD DEVIATIONS ON THE  
S. T. E. P. LISTENING TEST, FORM 3A

Group	Number	Mean	S. D.
I (MWR)	21	49.5	12.9
II (SRA)	21	52.0	12.1
III (Control)	21	53.0	13.2
Total	63	51.5	12.7

TABLE IX

ANALYSIS OF VARIANCE OF PRE-TEST SCORES ON THE  
S. T. E. P. LISTENING TEST, FORM 3A

Source of Variation	Sum of Squares	df	Mean Square	F
Between Groups	136.5	2	68.25	.40
Within Groups	10224.25	60	170.3	
Total	10460.75	62		

HYPOTHESIS 1

The first hypothesis states that comparison of mean pre-test and post test scores of partially-sighted students who received special instruction in listening comprehension and partially-sighted students who did not receive special instruction in listening comprehension will result in no significant differences.



The "t" test results presented in Table X show a significant mean increase in listening comprehension performance in Experimental Groups I and II; the former is significant at the .01 level of confidence, the latter at the .05 level. These data suggest conclusively that both experimental groups have significantly higher post test means than pre-test means and therefore, Hypothesis 1 is rejected.

It should be noted that there is no significant difference between the pre- and post test means of the control group. In fact, the control group actually shows a loss of 6.1 points. The statistical results seem to indicate clearly that instruction in listening comprehension significantly increases the students' ability in this learning area.

TABLE X  
COMPARISON OF PRE- AND POST TEST MEAN SCORES

Group	Number	Pre Mean		Post Mean		df	"t"
I (Experimental) (MWR)	21	49.5	12.9	63.4	14.2	40	3.23**
II (Experimental) (SRA)	21	52.0	12.1	62.8	13.4	40	2.67*
III (Control)	21	53.0	13.2	46.9	15.1	40	1.4 NS

\*\*Indicates a "t" test result significant at the .01 level of confidence.

\*Indicates a "t" test result significant at the .05 level of confidence.



It may be observed that in Group I the mean gain is 13.9 points. The raw data in Appendix G reveal that eight partially-sighted students gained over 20 points and one member of this group registered a gain of 43 points. Group II did not show as great a gain, but it did have a mean gain of 10.8 points. The raw data for this group show nine partially-sighted students gained over 15 points and two gained 34 and 35 points. Not only did the Control Group show a loss in overall mean score, but also displayed very slight individual gains. Of the ten students in Group III who made any positive gain, one increased by 8 points, one by 4, and the remaining eight by 2 points or less.

Since there was no significant difference between the pre- and post test means of the control group it is not surprising that 13 subjects showed a slight loss in listening comprehension performance. However, it is interesting and puzzling to note that two subjects in Experimental Group I showed losses of 22 and 8 points; and five subjects in Experimental Group II lost between 2 and 8 points. The writer is at a loss to explain these decreases in light of the obvious success of both sequences of listening lessons.

## HYPOTHESIS 2

The second hypothesis suggests that there will be no significant differences between the mean listening comprehension scores of



partially-sighted students who received special instruction in listening comprehension and those of partially-sighted students who had not received special instruction in listening comprehension.

Table XI reports the statistical comparison of the differences in means for Groups I and III, and Groups II and III. The "t" test was used to test for differences. The difference between the mean of Group I (MWR) and Group III (Control) were significant beyond the .01 level of confidence, as was the difference between group means for Group II (SRA) and Group III (Control).

TABLE XI  
COMPARISON OF POST TEST EXPERIMENTAL AND  
CONTROL GROUP MEAN SCORES

Group	Mean	S. D.	df	"t"
I (MWR)	63.4	14.2		
III (Control)	46.9	15.1	40	3.56**
II (SRA)	62.8	13.4		
III (Control)	46.9	15.1	40	3.53**

\*\*Indicates a "t" test result significant at the .01 level of confidence.

The significant differences after special instruction in listening comprehension lead to a rejection of the second hypothesis.



It seems clear that the partially-sighted subjects who received special instruction in listening comprehension show significant and important ability gains over those subjects receiving no special instruction of the type used in this study.

Table XII presents evidence both types of instruction in listening comprehension show increased listening comprehension, in this sample of partially-sighted students, as measured by the S. T. E. P. Listening Test, Form 3B.

TABLE XII  
COMPARISON OF POST TEST MEAN SCORES\*  
BETWEEN EXPERIMENTAL GROUPS

Group	Mean	S. D.	df	"t"
I (MWR)	63.4	14.2		
II (SRA)	62.8	13.4	40	.137 NS

\* Because the mean post-test was greater for Group I than for Group II, the writer computed also a t-test on this mean gain difference. The t ratio was .76, confirming the non-significant post test difference between Experimental Groups I and II.

### HYPOTHESIS 3

The third hypothesis states that there will be no significant differential effect between means resulting from two types of listening comprehension instruction.

Table XII presents "t" results of a comparison of the difference in group means between Groups I and II. The difference between



Group I (MWR) and Group II (SRA) was not significant. Thus, null Hypothesis 3 is held to be tenable. The data suggests that there were no significant differences between either type of listening comprehension instructional material used.

#### Teacher Questionnaire

At the conclusion of the study, a brief teacher questionnaire was distributed to the teachers of the two experimental groups. The questions asked and the teachers' reactions to them are included in Table XIII. It is interesting to note that most teachers (6 out of 7) answering the questionnaire would use listening instruction lessons if they were provided, and of the total number of teachers, a majority, (4 out of 7) would develop their own listening lessons if they were not supplied. All teachers involved (7) felt that listening lessons have value for partially-sighted students. The majority of teachers (6 out of 7) felt that listening lessons were of most value to the partially-sighted student of average ability. A majority (5 out of 7) felt the listening comprehension instructional material had helped partially-sighted students in other areas of their school work. Several teachers commented that a sequential program in listening comprehension instruction was something that the educational program for the partially-sighted student had needed for a long time to give it added vitality.



TABLE XIII  
TEACHER QUESTIONNAIRE

Itinerant Teachers		
1. I feel the listening comprehension instructional material was	difficult average easy	<u>7</u>
2. I feel listening comprehension lessons are of most value to children of _____ ability.	above average average below average	<u>6</u>
3. I feel listening lessons have value for partially-sighted students.	yes no	<u>7</u>
4. I feel the listening lessons have been of	little benefit some benefit great benefit	<u>6</u>
5. I felt the amount of time devoted to listening comprehension instructional material has been	insufficient adequate excessive	<u>6</u>
6. I would use listening comprehension instructional material with my partially-sighted students if it was provided	yes no	<u>1</u>
7. I would develop my own listening comprehension lessons if they were not provided.	yes no	<u>3</u>
8. I feel the listening comprehension instructional lessons have helped partially-sighted students in other areas of their school work.	yes no not sure	<u>5</u>



### Limitations of the Study

#### The Experimental Program

It was noted in Chapter III, that the experimental program was to offer two lessons, each of fifteen minutes duration, weekly, for a period of ten weeks. The total instructional time would amount to about five hours. This could be termed a minimal program, but some of the reasons for this procedure were:

1. Scheduling-- Itinerant teachers meet with their partially-sighted students an average of twice a week and rarely more than three times. The longest instructional time is about one hour.
2. Crowded Program-- The present instructional program is crowded, but it was believed that a listening comprehension lesson of fifteen minutes could be included without interfering with other academic instruction.
3. Materials-- A lack of materials constructed especially for listening comprehension instruction (Frazier, 1966).
4. School year-- The need to finish the experimental program within the school year 1965-66.

The expectation of this study was that a sequential program of listening instruction could effect results that would carry over into regular school activities. It was not practical to statistically test this expectation, but on the Teacher Questionnaire (Table XIII) a majority of teachers expressed a belief that this had been accomplished.



### The Age Group

As noted in Chapter III, the experiment was limited to partially-sighted students in grades four through nine.

### Intelligence Levels

No attempt was made to differentiate among intelligence levels. The reason for this was that several school districts and one residential school were represented in the sample. Many students did not have an I. Q. score in their records as testing materials for partially-sighted students are very limited.

### Applied Classroom Research

The nature of classroom research often implies a lack of control over many variables. Strict accounting of the responses on every lesson was not possible in this study. The reasons for these limitations were:

1. The limited number of partially-sighted students in the study.
2. A scattered population. (17 schools in the Tacoma Public Schools and the Oregon School for the Blind).
3. The number of itinerant teachers involved (7).
4. Two types of educational placement represented in the study. (Public schools versus residential school).



5. The My Weekly Reader Listening Comprehension Paragraphs had one paragraph in each lesson where the answers could vary and still be acceptable.

### Implications for Research

The findings of this study suggest several directions for further research. Questions which might be worthy of investigation are these:

1. Would a comparison of the same sequential instructional listening comprehension program between normally-sighted students and partially-sighted students effect similar results? The results of this study indicate partially-sighted students appear to improve significantly in listening comprehension. Fawcett (1966) in a similar listening instruction program with normally-sighted students, using S. T. E. P. Listening Test as a criterion measure, recorded lower pre-test mean scores by an average of 4.5 points in comparison to this study and yet, the post test mean scores in the two studies were very close to one another. Fawcett used 4th, 5th and 6th grade students in a large suburban school district.

2. How would residential and public school partially-sighted students compare in listening comprehension after using the same sequential instruction in listening comprehension? In this study the partially-sighted students from both educational programs appeared to do equally well on an individual basis. No attempt was made to



compare them. Such a comparison would provide opportunity to more adequately evaluate listening comprehension improvement in both residential and public school settings.

3. Could a sequential instructional program in listening comprehension with normally-sighted or partially-sighted students be successful in grades one to three? This study did not involve this age group. However the fourth graders included did equally as well as the older members.

4. What frequency (number of lessons per week and length of lesson) of sequential instruction in listening comprehension will effect optimal results with partially-sighted students? This study used two lessons weekly of fifteen minutes duration for ten weeks. Significant results were obtained but it is not determined in the present study what an optimal program would be.

5. Could other types of sequential instruction in listening comprehension produce similar significant results? This study used two types of instruction and no significant differences were found between them.

6. Does instruction in listening comprehension improve the reading ability of partially-sighted students? A number of studies reviewed suggest that with normally-sighted students there is a moderate to high correlation between improvement in listening



comprehension and improvement in reading. No correlation of reading and listening comprehension was attempted in this study.

7. Would Mentally Retarded, Physically Handicapped and other special education students show improvement in the listening learning area if given instruction in listening comprehension?

8. Is listening comprehension improvement effected by the intelligence of the students involved?

9. Is the effect of instruction in listening comprehension permanent?

#### Implications for Education

Chapter I. notes that most programs for partially-sighted students have been based largely on experience and observation. Little research on educational programs for partially-sighted students has been done. Most educators have expressed the need to emphasize listening with their partially-sighted students to make up for the visual loss. Few teachers have attempted to do anything in a sequential manner about the problem.

Literature reviewed in Chapter II reveals that partially-sighted students have a reading problem in not being able to progress as rapidly as normally-sighted students. Leading educators of the partially sighted have found a need for instruction in listening



comprehension. Many of these leaders feel that presentation of academic material through the auditory method is the only way possible for a partially-sighted student to receive academic instruction at the rate that is demanded by today's schools.

The findings of the present study would indicate the following recommendations to educators.

1. Teachers should become aware of the fact that listening comprehension is a skill that can be taught effectively to partially-sighted students.
2. There appears to be a need for a sequential listening comprehension instructional program in the listening learning area. The short term (ten weeks) intensive sequential instructional listening comprehension procedure used in the present study increased significantly the listening efficiency of partially-sighted students.
3. It appears that listening comprehension can be improved by use of a variety of approaches. The present study showed no mean differences between the two experimental groups.
4. The need is emphasized for educational institutions to give attention to the improvement of listening comprehension so that future teachers of partially-sighted students will be informed in the skill of teaching listening comprehension.



5. It would probably be wise to establish programs in regional academic centers to inform in-service teachers of the background and importance of sequential instruction in listening comprehension for partially-sighted students.

6. Materials (other than textbooks) should be constructed in order to aid the teacher of partially-sighted students in implementing listening comprehension instruction with other areas of academic instruction.

7. Educational opportunities may be enhanced for partially-sighted students by presentation of a sequential instructional listening comprehension program to improve these students' skill in this learning area. Increased skill in listening comprehension would supplement large print and auditory media presently in use.



## CHAPTER V

### SUMMARY OF THE STUDY

This chapter is a recapitulation of the problem, the purposes, and the results of the study. The hypotheses and procedures used to test them are summarized.

#### The Problem

Most educators of partially-sighted students agree that educational programs for the partially sighted presently are based on experience and observation. Little research has been done in educational programs for the partially-sighted student. Leading educators of partially-sighted students find that these students are educationally handicapped because of their slow reading rate. In order to overcome this handicap these educators feel that partially-sighted students should be trained in listening comprehension to enable them to keep up with their sighted counterparts in today's schools.

#### Review of the Literature

A survey of related reading revealed a dearth of literature concerned with instruction in listening comprehension for



partially-sighted students. Several references suggest that such instruction is desirable but none of these references includes procedures for teaching listening comprehension to partially-sighted students. The experimenter experienced some difficulty in locating published material for instruction in listening comprehension. It was difficult to find material of sufficient length to offer a sequence of twenty lessons of fifteen minutes duration.

#### Purpose

One purpose of this study was to present an experimental program of sequential instructional listening comprehension to partially-sighted students enrolled in grades four through nine and to compare their listening comprehension with a control group that did not receive instruction. Another purpose of the study was to compare the differential effects of two types of sequential listening comprehension instruction.

#### Procedures

Sixty-three partially-sighted students enrolled in grades four through nine, were selected for this study. Forty-two were enrolled in seventeen different schools served by itinerant teachers of Visually Handicapped of the Tacoma Public Schools. Twenty-one were enrolled



in grades four through nine, in special classes for partially-sighted students, at the Oregon School for the Blind. The subjects were divided into two experimental groups and one control group. A "stratified random sampling" technique was used to divide them into three groups. Each group was composed of fourteen partially-sighted students from Tacoma Public Schools and seven partially-sighted students from the Oregon School for the Blind.

All groups were pre-tested using S. T. E. P. Listening Test, Form 3A. The test was tape-recorded by the experimenter for a standardized presentation. A special answer sheet eliminated the need for reading. This answer sheet was enlarged to facilitate use by partially-sighted students, and to reduce any effect the visual handicap might have on the results of the listening test.

The partially-sighted students served by itinerant teachers of the Tacoma Public Schools were tested and given the listening comprehension instruction by their regular itinerant teacher on an individual basis. The partially-sighted students at the Oregon School for the Blind, were tested and given instruction in listening comprehension by the experimenter on a small group basis.

Group I received the sequential listening comprehension instruction sequence developed from My Weekly Reader Listening Comprehension Paragraphs. Group II received the sequential listening



comprehension instruction sequence developed from SRA Listening Lessons. Group III was a control group and received no special instruction in listening comprehension during the period of this study. The listening comprehension instruction sequences were taped by the experimenter for a standardized presentation.

Post testing for all groups was scheduled at the close of the ten week listening comprehension instruction sequence. S. T. E. P. Listening Test, Form 3B was used for this purpose. It was tape-recorded for a standardized presentation.

### Results of the Study

The study was designed to test three major hypotheses. Statistical treatments included use of the "F" test to determine that there were no significant differences among the three groups on the pre-test. The "t" test was used to examine for significance of differences between pre- and post test means of experimental and control groups, for differences between the experimental group and the control group, and between the two experimental groups. Following are the null hypotheses that were tested and the results that were found:

1. Comparison of mean pre-test and post test scores of partially-sighted students who received special instruction in listening



comprehension and partially-sighted students who did not receive special instruction in listening comprehension will result in no significant differences. Pre- and post test mean differences were significant in both experimental groups, but not in the control group.

2. There will be no significant differences between the mean listening comprehension scores of partially-sighted students who received special instruction in listening comprehension and those of partially-sighted students who had not received special instruction in listening comprehension. Both experimental group means were significantly better than the mean of the control group.

3. There will be no significant differential effect between means resulting from two types of listening comprehension instruction. This hypothesis was held tenable because of the lack of a significant difference between means of the two experimental groups.



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## APPENDIX A

### SAMPLE LESSONS FROM MY WEEKLY READER

#### LISTENING COMPREHENSION PARAGRAPHS

##### GROUP I (EXPERIMENTAL)



## MY WEEKLY READER LISTENING COMPREHENSION PARAGRAPHS

"In today's world we depend even more upon listening than upon reading. Most of the directions that are given to us are given orally. Most of the information that we pick up we get from listening. Most of our dealings with other people are through speaking and listening rather than through writing. For these reasons, we are going to learn how to listen better during the next several weeks. We will have twenty sessions on listening during our Listening Comprehension work."

"In each lesson I will read out loud to you. When I have finished, you will have your Listening Lesson Answer Sheet in front of you. I will read the statement and four answers to you. You are to circle the letter of the best answer. After all the statements are answered we will go back over your answers together. Please check those that are wrong. The Listening Lesson Answer Sheet will then be collected by your teacher."

### MY WEEKLY READER LISTENING COMPREHENSION PARAGRAPH NUMBER ONE

#### Part I

There's no time like snowtime - especially if you have a pair of skis. Gliding 30 or 40 miles an hour down a snowy mountain is one of the world's most thrilling sports.

Skiing began long ago in Norway and Sweden, where the winters last six months. The first skis were covered with leather. Now, most skis are made of oak or other hard wood covered with wax to make them slide swiftly. Each winter, contests in ski racing and jumping are held in many parts of the world.

#### Questions:

Directions - Circle the letter that best finishes the statement.

1. Most skis are waxed to make them:

- A. Shine    B. Grip    C. Sink    D. Slide



2. The story tells why skiing is:
  - A. Helpful
  - B. Easy
  - C. Popular
  - D. Harmful
3. The word snowy means:
  - A. A small piece
  - B. New snow
  - C. A fall of snow
  - D. Covered with snow
4. A good title for this story would be:
  - A. Skiing as a Sport
  - B. Long winters
  - C. Uses of Hard Wood
  - D. Waxing Skis

## Part II

Watch out! There are killers behind those trees. They are also on the trees, under the bark, and on the roots. The killers are hungry insects. Each year, insects kill many more trees than are destroyed by fires.

Forest insects are very thorough workers. They come swarming with their families up the trunks. Many insect beetles lay their eggs under the bark. When the larvae hatch, they often eat so much wood that the trees die.

### Questions:

Directions - Circle the letter that best finishes the statement.

1. Insects destroy more trees than:
  - A. Winds
  - B. Floods
  - C. Fires
  - D. Lumberman
2. This paragraph shows that a forest has:
  - A. Trees
  - B. Fires
  - C. Streams
  - D. Enemies
3. The word trunk means:
  - A. Main stems
  - B. Boxes
  - C. Roots
  - D. Bags



4. A good title for this story would be:

- A. Forest Fires
- B. Tree Killers
- C. Lightening
- D. A Green Forest

### Part III

Down under the water in many parts of the ocean are pink castles. Some are as small as dollhouses. Others tower as tall as a six story building.

These castles are the homes of tiny animals called "corals." The coral castles are as hard as stone. The tiny builders take chemicals from the ocean water to build their castles. Each little builder adds hardly more than a speck to the castle. A big castle may be hundreds of years old.

#### Questions:

Directions - Circle the letter that best finishes the statement.

1. The big castles are built:

- A. In unknown places
- B. For Princesses
- C. Over a long period of time
- D. With stone

2. The tiny corals build castles that:

- A. Dissolve
- B. Sink
- C. Crumble
- D. Last

3. The word speck means:

- A. Tiny bit, particle
- B. Decay on fruit
- C. A small spot
- D. A stain

4. A good title for this story would be:

- A. Age of Castles
- B. Delicate Colors
- C. The Coral Castles
- D. Kinds of Chemicals



## Part IV

## Special Directions:

"I am going to read a story aloud to you. Then I shall ask you some questions. You will write the answers in a few words on the answer sheet. Listen carefully."

Dogs are more than pets. Many of them are workers. About 20 American cities now use dogs in police forces.

Some dogs have unusual jobs. Gretchen, a dachshund, pulls a tape measure through underground pipes. By doing this, she makes measuring easier.

A gas company uses a dog to find leaks in gas pipes. The dog sniffs out leaks in underground pipes. The dog can inspect about one mile of pipe in an hour.

Questions: Remember you must write a word or phrase that finishes the question.

1. Where do some 20 American cities use dogs ?
2. For what special work does a gas company use a dog ?
3. What does this story tell us about dogs ?
4. What would be a good title for this story ?

COMPREHENSION CHECK FOR MY WEEKLY READER LISTENING  
COMPREHENSION PARAGRAPH NUMBER ONE

## Part I - Questions:

1. Most skis are waxed to make them: D. Slide.
2. The story tells why skiing is: C. Popular.
3. The word snowy means: D. Covered with snow.
4. A good title for this story would be: A. Skiing as a Sport.



**Part II - Questions:**

1. Insects destroy more trees than: C. Fires.
2. This paragraph shows that a forest has: D. Enemies.
3. The word trunk means: A. Main stems.
4. A good title for this story would be: B. Tree Killers.

**Part III - Questions:**

1. The big castles are built: C. Over a long period.
2. The tiny corals build castles that: D. Last.
3. The word speck means: A. A tiny bit, particle.
4. A good title for this story would be: C. The Coral Castles.

**Part IV - Possible answers are suggested.****Questions:**

1. Where do some 20 American cities use dogs?

Answer: In police forces.

2. For what special work does a gas company use a dog?

Answer: To find leaks in gas pipes.

3. What does this story tell us about dogs?

Answer: They can be trained to do special work.

4. A good title for this story would be:

Answer: A. Work Dogs Do; or, B. How Some Dogs Help.

This is the end of My Weekly Reader Listening Comprehension  
Paragraph Number One.



MY WEEKLY READER LISTENING COMPREHENSION  
PARAGRAPH NUMBER TEN

## Part I

The Mackinaw is a Coast Guard icebreaker that can churn its way through solid ice. The Mackinaw's propeller churns the water to help the bow crack the ice packs. The Mackinaw can rock itself loose when it gets stuck in ice and can rock itself free when its bow slides onto a thick floe.

## Questions:

Directions: Circle the letter that best finishes the statement.

1. The Mackinaw can rock itself when it becomes:  
A. Sleepy      B. Solid      C. Buried      D. Stuck
2. With the Mackinaw, the Coast Guard is more:  
A. Elaborate B. Anxious C. Efficient D. Obsolete
3. A word in the story that means "a field or sheet of floating ice," is:  
A. Ice Pack B. Floe C. Solid Ice D. Churns
4. A good title for this story would be:  
A. Features of the Icebreaker  
B. Dangerous Ice Packs  
C. Where Icebreakers Are Needed

## Part II

A very special suit must be made to protect the men who explore the moon. In outer space, the sun burns and the cold nights freeze any unprotected life.

Scientists are making suits that will wrap our moon men in an earthlike atmosphere. These space suits will be worn when the men leave the spaceship. The men will carry oxygen in packs on their backs.



**Questions:**

Directions: Circle the letter that bests finishes the statement.

1. When wearing the space suit, a man will be able to:
  - A. Breathe
  - B. Freeze
  - C. Burn
  - D. Swim
2. The word, "wrap," means:
  - A. Put in
  - B. Put out
  - C. Close
  - D. Cover
3. Space suits will help make exploration of the moon:
  - A. Very easy
  - B. Possible
  - C. Special
  - D. Dangerous
4. A good title for this story would be:
  - A. Spaceship Travel
  - B. Burning and Freezing in Space
  - C. Man on the Moon
  - D. Space Suits for Protection

**Part III**

In Burma, where tigers kill one out of every four baby elephants, mother elephants have invented an "auntie" system for protecting their calves. A mother elephant persuades another female elephant to act as her baby's aunt.

The calf grazes between the two elephants. At night it sleeps between them. If a tiger attacks, one elephant guards the calf while the other fights the tiger.

An Indian elephant recently showed considerable intelligence when he got caught in quicksand. When he trumpeted frantically for help, men threw him some heavy boards. The elephant stacked the boards into a pile and climbed out.

**Questions:**

Directions: Circle the letter that best finishes the statement.



1. Baby elephants need protection from:  
A. Tigers      B. Quicksand      C. Aunts      D. Guards
2. The word, "persuades," means:  
A. Proves something to be true      B. Argues  
C. Gets someone to do something      D. Agrees
3. Elephants make good use of their:  
A. Calves      B. Intelligence      C. Trumpets      D. Enemies
4. A good title for this story would be:  
A. How Burma's Tigers Live  
B. Where Elephants Live  
C. Stacking Boards  
D. How Elephants Solve Problems

#### Part IV

Special Directions: "I am going to read a story aloud to you. Then I shall ask you some questions. You will write the answers in a few words on the answer sheet. Listen carefully."

Pittsburgh has one of the largest and most unusual auditoriums in the world. The auditorium is roofed with a stainless steel dome that can be opened or closed in two and a half minutes. The dome is also the world's largest.

The dome is divided into eight pie-shaped sections. Six of the sections are movable. Only one man is needed to operate the roof. Sitting at a panel, he pushes buttons to drive the motors and other equipment that open and close the roof.

The auditorium is used for ice shows, horse shows, basketball games, hockey matches, and other similar events. When a stage is needed for stage performances, part of the seating section will be raised (by machine) to serve as the stage. The auditorium can seat up to 13,600.



Questions: Remember you must write a word or phrase that finishes the questions.

1. Give three facts about the stainless steel dome.
2. Name three uses for the auditorium.
3. What does the story tell about many of Pittsburgh's people?
4. What would be a good name, or title, for this story?

COMPREHENSION CHECK FOR MY WEEKLY READER LISTENING  
COMPREHENSION PARAGRAPH NUMBER TEN

Part I - Questions:

1. The Mackinaw can rock itself when it becomes: D. Stuck.
2. With the Mackinaw, the Coast Guard is more: C. Efficient.
3. A word in the story that means, "a field or sheet of floating ice," is: B. Floe.
4. A good title for this story would be:  
A. Features of the Icebreaker.

Part II - Questions:

1. When wearing the space suit, a man will be able to: A. Breathe.
2. The word, "wrap," means: D. Cover.
3. Space suits will help make exploration of the moon: B. Possible.
4. A good title for this story would be:  
D. Space Suits for Protection.



**Part III - Questions:**

1. Baby elephants need protection from: A. Tigers.
2. The word, "persuades," means: C. Gets someone to do something.
3. Elephants make good use of their: B. Intelligence.
4. A good title for this story would be:  
D. How Elephants Solve Problems.

**Part IV - Possible suggested answers.****Questions:**

1. Give three facts about the stainless steel dome.

Answer: Can be opened or closed in two and a half minutes; is world's largest; six of the eight sections in dome are movable; roof operated by pushing buttons on a panel.

2. Name three uses for the auditorium.

Answer: Ice shows, horse shows, basketball, hockey, stage performances.

3. What does the story tell about many of Pittsburgh's people?

Answer: Like to watch sports events; willing to pay for a modern auditorium for sports events.

4. What would be a good name, or title, for this story?

Answer: a. Pittsburgh's New Auditorium; or  
b. Special Features and Uses of Pittsburgh's Auditorium.

This is the end of My Weekly Reader Listening Comprehension

Paragraph Number Ten.



**APPENDIX B**  
**SAMPLE LESSONS FROM SRA**  
**LISTENING LESSONS**  
**GROUP II (EXPERIMENTAL)**



## SRA LISTENING LESSONS

"In today's world we depend even more upon listening than upon reading. Most of the directions that are given to us are given orally. Most of the information that we pick up we get from listening. Most of our dealings with other people are through speaking and listening rather than through writing. For these reasons, we are going to learn how to listen better during the next several weeks. We will have twenty lessons on listening during our Listening Comprehension work."

"In each lesson I will read out loud to you. When I have finished, you will have your Listening Lesson Answer Sheet in front of you. I will read the statement and four answers to you. You are to circle the letter of the best answer. After all the statements are answered we will go back over your answers together. Please check those that are wrong. The Listening Lesson Answer Sheet will then be collected by your teacher."

## LISTENING LESSON ONE

## Part I

Those ears of yours are tricky sometimes, aren't they? They don't always work when you want them to. But they can be trained. Your ears can be trained to listen just as your eyes can be trained to read. In both listening and reading, you are trying to understand what another person is saying, except that one person may say it out loud for you to listen to, while another may say it silently on paper for you to read.

We are just beginning to realize how important it is to learn how to listen better. In the first place, we all spend a great deal of time listening. The average person spends about half of his time just listening. If you spend so much time at a thing, it is worth learning to do it well, isn't it? That's what the U.S. Air Force thinks; it trains all its pilots and officers in better listening.

Good listening is worth money, too. Some large stores are training their employees to listen better so that they can sell more things to customers. Some colleges are beginning to teach their students how to listen better so that they can get more out of their college work.

You can see now that, as you grow up, you are going to have to learn to listen better. It's a good thing to get a head start. And when



you stop to think about it, you consider listening to be pretty important right now. You wouldn't turn off the sound while you were watching TV, would you?

How can you learn to improve your listening? You can learn the skills it takes to listen properly and then practice them. During the next several weeks you will be given a chance to learn these skills and to practice using them.

There are really just four parts to good listening -- T, Q, L, and R. Now let's take it slowly and see what TQLR means. There is T for tune-in; there is Q for question; L for listen; and R for review--tune-in, question, listen, review.

Are these skills hard to learn? No, not really. As a matter of fact, you are probably doing a good job with them every day--at certain times. Can you guess when one of these times might be? Yes, when you watch and listen to TV, and why do you listen well then? Because you are actually "using" TQLR.

Maybe you're not getting all you would like to out of TV. Maybe you'd like to learn how to use the TQLR method even better. Not only will it let you enjoy TV more but--even more important--it will help you listen better in school. Good listening, like good reading, can improve your school work, make school more interesting, even help you earn better grades.

For the past few minutes, you have been using TQLR. You have tuned in to what I was saying, asked questions of yourself as we went along, and you have "listened." Now I am going to help you with the "R"--the review part--by going over the things we've just covered. We have found out three things; first, listening and reading are very much alike; second, it's important to improve your listening; and third, there is a special way to do it--by using TQLR.

For our next listening lesson, we will learn more about TQLR. and how to use it.



## COMPREHENSION CHECK FOR LISTENING LESSON ONE

## Part I

How well did you listen?

Directions: Draw a circle around the letter standing for the one best answer.

1. Listening and reading are
  - A. much different
  - B. exactly alike
  - C. used only by the U.S. Air Force
  - D. much alike
  
2. Learning to listen better is important because
  - A. we spend all of our time doing it
  - B. then we can talk more
  - C. we spend so much of our time listening
  - D. the Air Force will make us do it
  
3. As you get older,
  - A. you won't have to worry about listening
  - B. you will have to learn to listen better
  - C. you will turn off the sound on TV
  - D. you will stop listening
  
4. The four parts to good listening are
  - A. TVTQ
  - B. TQTV
  - C. TQLR
  - D. tune-in
  
5. Good listening can help you
  - A. make better grades in school
  - B. enjoy TV more
  - C. make a better living
  - D. all three: A, B, and C.
  
6. People who are good listeners
  - A. were born that way
  - B. learned how
  - C. are in the Air Force
  - D. can't see well



## LISTENING LESSON ONE

## Part II

In our first listening lesson, we learned about a new way of listening--a way that will help us to learn better through our ears. We also learned that listening is very much like reading. In both, you are trying to understand what someone is saying--whether it is spoken out loud or written on paper. I wonder if some of you have begun to understand how SQR and TQLR are alike?

Listening is, Tune-in, Question, Listen, and Review. Reading is Survey, Question, and Read; and sometimes we go back and reread, so that we actually do use the "review" step in our reading, too, whenever we need to remember something especially well.

Now let's study TQLR a little closer. Just what do you do when you use this way of better listening? Let's go back to your favorite TV program and see just how you have been using it there. Let's imagine just what is going on in your mind as you watch and listen.

In the first place, you used the T--tune-in. You tuned in your TV set to the right station, and now you're tuning in your mind to the program. You know in a general way what it is all about. You may have seen a program something like this before, or the title of the program may tell you something about it.

Now you're using the Q part of TQLR--you're asking questions. You're asking yourself what is going to happen on this program. You probably know some of the things that might happen, but you're asking "What might happen this time?" "Where will they go?" "What will they do?" Of course, all this takes place very quickly in your mind, at the very beginning of the program, and it has helped you get ready for the next step: L--listening. This is the part where you keep both ears wide open all during the program to see if your questions are being answered. This is where you find out things, learn new things, and try to figure out what's coming next.

After listening a while, the program is over, and you do the last step, the R step--you review. You are reviewing when you think over what happened in the program, or when you talk about it with a friend. If you want to remember something special, like what the Lone Ranger said to the Indian, you say it over to yourself. If you want to remember



how a thing looked so that you could make one like it, you try to make a picture of it in your mind. In all these things, you are reviewing.

In our next listening lesson we will learn still more about TQLR and how to use it. Meanwhile, try it whenever you listen. Tune-in to what the speaker is saying. Ask questions; ask yourself, "What is he probably going to talk about?" Listen with both ears, and don't let your mind run away. The review. Remember: T-Q-L-R.

#### COMPREHENSION CHECK FOR LISTENING LESSON ONE

##### Part II

How well did you listen?

Directions: Draw a circle around the letter standing for the one best answer.

1. In both listening and reading you are
  - A. talking out loud
  - B. trying to hear better
  - C. trying to understand what someone is saying
  - D. keeping both ears open
  
2. TQLR and SQR are
  - A. very much alike
  - B. exactly alike
  - C. very difficult
  - D. both ways of listening better
  
3. Tune-in helps you to know
  - A. how a story will end
  - B. exactly what the speaker will say
  - C. in a general way what the speaker will say
  - D. who will win
  
4. The question part of TQLR helps you to
  - A. get ready to review
  - B. know what the speaker will say next
  - C. talk louder than the speaker
  - D. get ready to listen



5. One thing you do while listening is to
  - A. see if your questions are being answered
  - B. try to keep one eye open
  - C. ask questions out loud
  - D. turn your head sideways
  
6. In reviewing, you
  - A. make the TV go backwards
  - B. think or talk over what you have just heard
  - C. know what the Indian said
  - D. listen with only one ear

#### ANSWER CHECK FOR LISTENING LESSON ONE

##### Part I

1. Listening and reading are
  - D. much alike.
  
2. Learning to listen better is important because
  - C. we spend so much of our time listening.
  
3. As you get older
  - B. you will have to learn to listen better.
  
4. The four parts to good listening are
  - C. TQLR
  
5. Good listening can help you
  - C. all three: A, B, and C.
  
6. People who are good listeners
  - B. learned how.

##### Part II

1. In both listening and reading you are
  - C. trying to understand what someone is saying.
  
2. TQLR and SQR are
  - A. very much alike.
  
3. Tune-in helps you to know
  - C. in a general way what the speaker will say.



4. The questions part of TQLR helps you to  
D. get ready to listen.
5. One thing you do while listening is to  
A. see if your questions are being answered.
6. In reviewing, you  
B. think or talk over what you have just heard.

This is the end of Listening Lesson One.

#### SRA LISTENING LESSON EIGHT

##### Part I

This is a story told by a famous big game hunter, John Carlova. Let's imagine Mr. Carlova is here with us now, telling us of this great experience he had. Now Mr. Carlova begins:

"The most exciting fight I ever saw was between a mother elephant and a big snake called a python. The prize they were fighting for was the mother elephant's baby. The thirty-foot python had caught it and was trying to swallow it.

"I came upon the python and the little elephant in the heart of the jungle. I wanted to shoot the python. But I did not fire. I was afraid there might be another python near. It might come after me if I killed the first one. So I went up a tree to get out of the way and to see better.

"The baby was on its side. It was bellowing with pain. The big snake was wrapped around its body. The snake had the little elephant's trunk in its mouth and was trying to swallow it.

"I heard a crashing noise behind me. The mother elephant rushed out to save the baby. She grabbed the snake's tail and pulled. The python slipped free. It kept its hold on the baby. The animals began to kick up dust and leaves. It was hard at times to see what was happening.

"I saw the elephant wrap her trunk around the python. She lifted it from the ground. The baby rolled away. But the python still held on to its trunk.



"The python was getting mad. It lashed up its tail and grabbed the mother's trunk. Now the big snake was holding the mother's trunk with its tail. It was holding the baby's trunk in its mouth.

"I could tell that the mother was afraid. She knew she had to work quickly. She lifted her trunk and turned sideways as fast as she could. The python lost its hold on the baby. The little elephant rolled away.

"At just the right second, the mother pulled back. She whirled the snake like a whip. She lashed it against a tree. The snake pulled free. It slipped downward and wrapped itself around the mother's leg.

"Now the old elephant kicked her legs about. She struck the snake with her trunk. She fell to the ground. She got up again with the python still holding on.

"At last, looking tired, the mother stood still. The snake slipped away and raced toward the baby. Even more quickly, the mother ran after the snake. She grabbed it just before it reached the baby.

"This time she had to be sure. She whirled the python against a tree trunk, not once, but many times. When there was no more life in the snake, she put it down. She pounded it with her big feet. After a while, the snake's skin was all I could see.

"The mother elephant went to her baby. It stopped crying. Slowly and kindly the mother pushed it to its feet. As she led it away, I could hear it crying again, softly. But the fight for its life had been won. The battle had lasted more than an hour."

#### COMPREHENSION CHECK FOR LISTENING LESSON EIGHT

##### Part I

How well did you listen?

Directions: Draw a circle around the letter standing for the one best answer.

1. The man telling this story is
  - A. a fisherman
  - B. a big game hunter
  - C. a school teacher
  - D. a zoo keeper



2. A python is
  - A. a baby elephant
  - B. a mother elephant
  - C. a large bird
  - D. a snake
3. The author did not kill the python because
  - A. he thought another python might be near
  - B. he didn't have a gun
  - C. he was afraid the elephant might attack him
  - D. he heard the mother elephant coming
4. The fight between the elephant and the python had lasted
  - A. over two hours
  - B. half an hour
  - C. over one hour
  - D. almost three hours
5. The elephant made sure the python was dead by
  - A. throwing it in a stream
  - B. hitting it against a tree
  - C. stepping on it
  - D. burying it
6. The mother elephant killed the snake because
  - A. it was so big
  - B. it was going to kill her
  - C. elephants don't like pythons
  - D. she was looking for excitement

#### LISTENING LESSON EIGHT

##### Part II

Today's story is a scientific one. It starts with a question: What will be gained by sending rockets into outer space? As I start to read, use T, Q, and L to find the answers to this question. Listen carefully. Your review will come with the comprehension check.

What will be gained by sending rockets into outer space? The answer lies in what we will learn from the universe that surrounds us.

So far the only bodies from outer space that have come into contact with the earth are meteorites and the remains of a few comets.



A few have reached the earth's surface without being fully destroyed. But most meteors are burned up in the upper layers of the atmosphere. Thus we must observe other cosmic bodies from a distance of millions of miles. And, what is more, we must look at them through an ocean of air.

The atmosphere around the earth hampers our study of the universe. It distorts and blurs the view we have of other bodies in space. To lessen the effect of the atmosphere, scientists have used balloons to send telescopes six to ten miles above the earth.

Imagine how helpful an astronomical observatory in space would be. Even a simple glance at the sun or at a planet through a rocket telescope would tell scientists a great deal. They would be able to see such things as the long streams of the solar corona that at present can be seen only during a total eclipse of the sun. The rocket could take samples of interplanetary matter.

Men have already started to use rockets for a closer look at bodies in space. In 1959, Russian scientists launched an automatic space station. They used it to photograph the far side of the moon for the first time. At a signal from the earth, jets stopped the space station from spinning, lined it up with the sun's rays, and focused two lenses on the moon. The exposed film was developed automatically. A scanner changed the picture to electrical impulses that were sent to the earth. The image was so clear that it even showed details such as the central peaks inside the moon's craters.

Scientists saw many differences between the two sides of the moon. On the earthward side, many of the craters have bright rays running from them that can be seen clearly at full moon. The same formations are not found on the other side of the moon. The far side of the moon also seems to lack those dark patches that are called seas.

A thorough study of these differences will cast new light on the development of the moon's crust. It will also promote a better understanding of the development of our own planet.

A space laboratory offers immense possibilities. Because of the atmosphere's interference, scientists usually have to use telescopes that magnify no more than 300 to 400 times. But for a cosmic laboratory it will be possible to use telescopes that magnify tens of thousands of times. Thus scientists will be able to observe much finer details on the moon and on other planets.



Everything that has been said so far is based on the assumption that our cosmic observatory will observe planets at distances of millions of miles. But there is the possibility that such a rocket might land on other planets. What a great wealth of information would be available if that could happen!

#### COMPREHENSION CHECK FOR LISTENING LESSON EIGHT

##### Part II

How well did you listen?

Directions: Draw a circle around the letter standing for the one best answer.

1. The only bodies from space that have come into contact with the earth are
  - A. the remains of meteors and comets
  - B. a few falling stars
  - C. space satellites
  - D. large meteors
  
2. Our view of bodies in space is blurred by
  - A. air
  - B. space dust
  - C. the sun's light
  - D. meteors
  
3. Rocket telescopes have taken pictures of the
  - A. other planets
  - B. solar corona
  - C. far side of the moon
  - D. sun
  
4. Scientists know that the far side of the moon
  - A. is just like the near side
  - B. has dark patches called seas
  - C. is different from the near side
  - D. has bright rays
  
5. Studying the moon will help scientists
  - A. to launch moon rockets
  - B. to learn about the earth's development
  - C. to build better telescopes
  - D. to position a cosmic observatory



6. Scientists use telescopes that magnify only 300 to 400 times because

- they can't make more powerful ones
- they can't handle larger ones
- the atmosphere interferes
- they don't need to see details

ANSWER CHECK FOR LISTENING LESSON EIGHT

Part I

- The man telling this story is  
B. a big game hunter.
- A python is  
D. a snake
- The author did not kill the python because  
A. he thought another python might be near.
- The fight between the elephant and the python had lasted  
C. over one hour.
- The elephant made sure the python was dead by  
C. stepping on it.
- The mother elephant killed the snake because  
B. it was going to kill her.

Part II

- The only bodies from space that have come into contact with earth are  
A. the remains of meteors and comets.
- Our view of bodies in space is blurred by  
A. air.
- Rocket telescopes have taken pictures of the  
C. far side of the moon.
- Scientists know that the far side of the moon  
C. is different from the near side.



5. Studying the moon will help scientists  
    B. to learn about the earth's development.
  
6. Scientists use telescopes that magnify only 300 to 400 times  
    because  
    C. the atmosphere interferes.

This is the end of Listening Lesson Eight.



## APPENDIX C

### MY WEEKLY READER LISTENING COMPREHENSION PARAGRAPHS ANSWER SHEET



## My Weekly Reader Listening Comprehension Paragraph

## Answer Sheet

## Part I

## Questions:

1. A B C D
2. A B C D
3. A B C D
4. A B C D

## Part II

## Questions:

1. A B C D
2. A B C D
3. A B C D
4. A B C D

## Part III

## Questions:

1. A B C D
2. A B C D
3. A B C D
4. A B C D

## Part IV

## Questions:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_



**APPENDIX D**

**SRA LISTENING LESSON ANSWER SHEET**



## SRA Listening Lesson Answer Sheet

Name \_\_\_\_\_  
 Listening Lesson  
 Answer Sheet

1. A B C D
2. A B C D
3. A B C D
4. A B C D
5. A B C D
6. A B C D
7. A B C D
8. A B C D
9. A B C D
10. A B C D

Name \_\_\_\_\_  
 Listening Lesson  
 Answer Sheet

1. A B C D
2. A B C D
3. A B C D
4. A B C D
5. A B C D
6. A B C D
7. A B C D
8. A B C D
9. A B C D
10. A B C D

Name \_\_\_\_\_  
 Listening Lesson  
 Answer Sheet

1. A B C D
2. A B C D
3. A B C D
4. A B C D
5. A B C D
6. A B C D
7. A B C D
8. A B C D
9. A B C D
10. A B C D

Name \_\_\_\_\_  
 Listening Lesson  
 Answer Sheet

1. A B C D
2. A B C D
3. A B C D
4. A B C D
5. A B C D
6. A B C D
7. A B C D
8. A B C D
9. A B C D
10. A B C D



APPENDIX E

S. T. E. P. LISTENING TEST FORM 3A AND 3B

ANSWER SHEET



## Sample

A B C D

O    

## Form

Name \_\_\_\_\_

Last Name \_\_\_\_\_

Grade \_\_\_\_\_

Age \_\_\_\_\_

Years \_\_\_\_\_ Months \_\_\_\_\_

School \_\_\_\_\_

Date \_\_\_\_\_

Part One				Part Two													
1	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	1	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
2	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	2	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H
3	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	3	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
4	<input type="checkbox"/> F	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	4	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H
5	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	5	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
6	<input type="checkbox"/> F	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	6	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H
7	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	7	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
8	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	8	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H
9	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	9	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
10	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	10	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H
11	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	11	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
12	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	12	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H
13	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	13	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
14	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	14	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H
15	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	15	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
16	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	16	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H
17	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	17	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
18	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	18	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H
19	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	19	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
20	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	20	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H
									20	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	<input type="checkbox"/> H



## APPENDIX F

## GENERAL DIRECTIONS

S. T. E. P. LISTENING TEST FORM 3A AND 3B



## General Directions

S. T. E. P. Listening Test Form 3A and 3B

## General Directions:

This is a test of how well you can understand the kinds of things that are often spoken aloud to you. You should take the test in the same way that you would work on any new and interesting assignment. Here are a few suggestions which will help you to earn your best score.

1. Make sure you understand the test directions before you begin working. You may ask any questions about any part of the directions you do not understand.
2. You will make your best score by answering every question because your score is the number of correct answers you mark. If a question seems to be too difficult, make the most careful guess you can, rather than waste time puzzling over it.

Are there any questions about these directions ?

## Directions for Part One:

A number of short selections will be read aloud to you. These selections will include such things as stories, directions, poems, explanations, and arguments. After each selection, you will hear a group of questions or incomplete statements. Four suggested answers are given for each question or incomplete statement. You are to decide which one of these answers is best.

Remember to listen carefully because each selection and each question will be read aloud only once.

You must mark all of your answers on the separate answer sheet you have been given. Mark your answer sheet by blackening the space having the same letter as the answer you have chosen. For example, suppose the following selections and questions were read to you:

## Selection

The old man hurried back to his house, and his mind was full of many things. When he suddenly saw a fat, yellow cat sitting in



his best armchair, he could only stand there rubbing his eyes and wondering whose house he was in.

#### Question Number Zero

When the old man saw the yellow cat in his best armchair, how did he feel?

##### Example 0

A Pleased

B Surprised

C Sad

D Angry

Since the old man was surprised to see the cat, you should choose the answer lettered B. On your answer sheet, you would first find the row of spaces numbered the same as the question--in the example above, it is 0. Then you would blacken the space in this row which has the same letter as the answer you have chosen. See how the example has been marked on your answer sheet.

Mark your answer marks heavy and black. Mark only one answer for each question. If you change your mind about the answer, be sure to erase the first mark completely.

Are there any questions about these directions?

Now let me go over the instructions briefly. I will read each selection to you; then I will read each question and its four answer choices. Then I will pause to give you time to mark your answer. Remember to listen carefully because I can read selections, questions, and choices only once. Do not mark your answer until I have finished reading the question.

Are there any questions about how you are to take the test?



APPENDIX G  
RAW SCORES AND GROUP MEANS FOR EXPERIMENTAL  
AND CONTROL SUBJECTS



## GROUP I (EXPERIMENTAL)

## MY WEEKLY READER LISTENING COMPREHENSION PARAGRAPHS

Grade	Age	Sex	Eye Anomaly	Visual Acuity		School Source	Pre-	Post-
				OD	OS		Test	Test
1.	4	10	M	Myopia Nystagmus	CF 3'	10/200	OSB	42 44 +
2.	4	11	M		20/100	20/100	TPS	58 66 +
3.	4	11	M		20/150	20/150	TPS	55 33 -
4.	4	11	M	Aphakia Retina Detachment	20/200	20/200	TPS	55 61 +
5.	4	12	M	Myopia Nystagmus	20/100	20/200	TPS	68 79 +
6.	5	11	F		20/100	20/100	TPS	51 71 +
7.	5	11	F		20/80	20/80	TPS	52 44 -
8.	6	13	F	Nystagmus Atrophy	Nil	20/80	TPS	66 68 +
9.	6	14	F	Retrothalental Fibroplasia	CF 1'	20/400	OSB	41 56 +
10.	7	13	M	Retrothalental Fibroplasia	LP	5/200	TPS	32 75 +
11.	7	14	M	Macular Agenesis	20/100	20/100	TPS	18 54 +
12.	7	13	M	Congenital Cataracts	20/300	CF 4'	OSB	61 72 +
13.	7	13	M	Hyperopic Astigmatism Strabismus	20/50	20/200	TPS	47 56 +
14.	7	15	M	Retrothalental Fibroplasia	20/100	LP	TPS	46 71 +
15.	8	14	M		20/100	20/100	OSB	24 34 +
16.	8	14	F	Myopia Progressive	20/40	7.00-1.00 x 50	TPS	59 74 +
17.	8	14	M	Congenital Cataracts	20/200	20/200	OSB	46 77 +
18.	8	14	F		20/300	20/300	TPS	55 79 +
19.	8	16	M	Macular Agenesis	20/300	20/300	TPS	65 79 +
20.	9	14	M	Retinitis Pigmentosa	20/80	20/100	OSB	41 73 +
21.	9	16	M	Retrothalental Fibroplasia	LP	20/200	OSB	57 66 +
Means	6.98	13.6					49.5	63.4
S.D.	1.13	1.7					12.9	14.2

\*TPS = Tacoma Public Schools, Tacoma Washington

\*OSB = Oregon School for the Blind, Salem, Oregon



## GROUP II (EXPERIMENTAL)

## SRA LISTENING LESSONS

Grade	Age	Sex	Eye Anomaly	Visual Acuity		School Source	Pre-	Post-
				OD	OS		Test	Test
1.	4	11	M	Retrorenal Fibroplasia	20/100	20/100	TPS	53
				Retina Detachment				51 -
2.	4	12	M	Myopia	20/70	20/100	TPS	41
3.	4	11	M	Albinism	20/200	20/300	OSB	56
4.	4	12	M	Congenital Myopia	20/70	20/70	TPS	56
5.	5	13	F	Optic Atrophy	15/200	15/200	OSB	55
6.	6	13	M	Cataracts	20/60	20/80	TPS	53
7.	6	11	F	Congenital Cataracts	15/300	20/200	OSB	57
8.	7	14	M	Macular Agenesis	20/80	20/80	TPS	14
				Congenital Cataracts				48 +
9.	7	15	F	Congenital Cataracts	CF 4'	20/200	OSB	54
10.	7	17	M		20/200	20/200	TPS	38
11.	7	15	M		20/200	Nil	TPS	43
12.	7	15	M	Nystagmus	20/300	CF 4'	TPS	45
13.	7	14	F	Myopia	20/100	20/100	TPS	61
14.	8	15	F	Retrorenal Fibroplasia	Nil	20/200	OSB	72
				Congenital Cataracts				76 +
15.	8	17	M	Congenital Cataracts	20/300	20/300	TPS	55
16.	8	16	M		20/100	20/100	TPS	58
17.	8	15	M	Surgery	20/200	?	TPS	56
18.	8	16	M	Retrorenal Fibroplasia	20/100	20/100	TPS	54
19.	8	15	M	Retrorenal Fibroplasia	20/300	20/300	OSB	57
20.	9	17	M	Retinoblastoma	20/300	Nil	OSB	73
21.	9	16	M	Enucleation	Nil	20/20	TPS	42
Means	7.31	14.8					52.0	62.8
S.D.	1.72	1.93					12.1	13.4

\*TPS = Tacoma Public Schools, Tacoma, Washington

\*OSB = Oregon School for the Blind, Salem, Oregon



## GROUP III (CONTROL)

	Grade	Age	Sex	Eye Anomaly	Visual Acuity		School Source	Pre-Test		Post-Test	
					OD	OS					
1.	4	11	F	Dislocated Lens	20/200	20/100	TPS	65	47	-	-
2.	4	12	M	Retrolental Fibroplasia	No LP	20/200	OSB	42	26	-	-
3.	4	11	F		20/200	Nil	TPS	56	45	-	-
4.	4	10	M	Strabismus	20/200	20/200	TPS	60	54	-	-
5.	5	13	F		20/200	20/300	TPS	65	66	+	-
6.	5	13	F	Albinism	20/300	20/300	TPS	53	55	+	-
7.	6	14	F		20/200	20/200	TPS	22	20	-	-
8.	6	12	F		20/30	20/50	TPS	61	36	-	-
9.	7	16	M	Optic Atrophy	20/200	20/300	OSB	53	54	+	-
10.	7	16	M	Nystagmus	20/200	20/200	OSB	66	32	-	-
11.	7	14	F	Congenital Cataracts	20/200	20/200	OSB	68	69	+	-
12.	7	15	M		LP	20/200	TPS	51	37	-	-
13.	7	14	M		20/70	20/70	TPS	17	18	+	-
14.	7	15	M	Myopia, Retina Detachment	20/100	20/100	TPS	52	56	+	-
15.	8	16	M	Myopia, Nystagmus Photophobia	20/300	20/300	OSB	68	70	+	-
16.	8	15	M	Retrolental Fibroplasia	20/300	20/300	OSB	47	35	-	-
17.	8	14	M		20/20	Nil	TPS	54	57	+	-
18.	8	16	F	Nystagmus, Astigmatism	20/20	20/60	TPS	51	41	-	-
19.	9	17	M	Optic Atrophy	15/300	1/300	OSB	47	55	+	-
20.	9	16	M	Retrolental Fibroplasia	20/200	20/200	TPS	66	62	-	-
21.	9	17	M	Retrolental Fibroplasia	20/300	20/300	TPS	49	50	+	-
Means		7.32	14.6					53.0	46.9		
S.D.		1.67	2.07					13.2	15.1		

\*TPS = Tacoma Public Schools, Tacoma, Washington

\*OSB = Oregon School for the Blind, Salem, Oregon



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